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DEPARTMENT OF THE INTERIOR AND RELATED AGENCIES APPROPRIATIONS FOR 1981

HEARINGS

BEFORE A
SUBCOMMITTEE OF THE
COMMITTEE ON APPROPRIATIONS
HOUSE OF REPRESENTATIVES
NINETY-SIXTH CONGRESS
SECOND SESSION

SUBCOMMITTEE ON THE DEPARTMENT OF THE INTERIOR AND
RELATED AGENCIES

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TUESDAY, MARCH 11, 1980.

SMITHSONIAN INSTITUTION

WITNESSES

S. DILLON RIPLEY, SECRETARY

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CHARLES BLITZER, ASSISTANT SECRETARY FOR HISTORY AND ART

DAVID CHALLINOR, ASSISTANT SECRETARY FOR SCIENCE

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TOM L. PEYTON, DIRECTOR, FACILITIES SERVICES

ROGER KENNEDY, DIRECTOR, NATIONAL MUSEUM OF HISTORY AND TECHNOLOGY

THEODORE H. REED, DIRECTOR, NATIONAL ZOOLOGICAL PARK

IRA RUBINOFF, DIRECTOR, SMITHSONIAN TROPICAL RESEARCH INSTITUTE

JON E. YELLIN, OFFICE OF PROGRAMMING AND BUDGET

INTRODUCTORY REMARKS

Mr. YATES. This is the hearing for the 1981 appropriation for the Smithsonian Institution. Appearing in support of that appropriation is the distinguished Secretary, Mr. S. Dillon Ripley. He is accompanied by a new Under Secretary, Phillip S. Hughes, who is new to this table as Under Secretary but not new to this table. For many years we have known Mr. Hughes in many roles, and we are glad to see him here in this one.

Mr. HUGHES. Thank you, sir.

Mr. YATES. He is also accompanied by Charles Blitzer, Assistant Secretary for History and Art, David Challinor, for Science, Julian Euell for Public Service, John Jameson, Paul Perrot, Christian C. Hohenlohe, Tom L. Peyton, Director of Facilities Services, Roger Kennedy, Theodore H. Reed, Ira Rubinoff, from Panama, and Jon E. Yellin, Director, Office of Programming and Budget, and a number of others who are here from the Smithsonian.

Your statement, Mr. Ripley, may go into the record at this point, to be followed by the biographies of Mr. Hughes, Mr. Kennedy, Mr. Hohenlohe, Mr. Peyton, and Mr. Rubinoff.

[The information follows:]

STATEMENT OF S. DILLON RIPLEY, SECRETARY
SMITHSONIAN INSTITUTION
ON APPROPRIATIONS REQUESTED FOR FISCAL YEAR 1981

Mr. Chairman and Members of the Subcommittee:

Once again it gives me great pleasure to appear before you and to present the Smithsonian's FY 1981 budget request. The programs described in this budget build upon the progress that the Institution has been able to make thanks to the encouragement and support of this Subcommittee. Our request also proposes some new initiatives which we believe will be of great interest to the public, in Washington and throughout the country.

Among the notable accomplishments of the past year is the progress that has been made on our collections inventories. This work is of particular importance as we prepare to relocate parts of our collections to the Museum Support Center. By the end of FY 1979, the National Museum of Natural History had created and placed on computer more than 425,000 inventory records, 60 percent of which were of the Department of Anthropology and the rest distributed throughout seven other departments. The National Museum of History and Technology had inventoried and created inventory records for 114,000 objects and the Cooper-Hewitt Museum did the same for 55,000 objects. Continuing substantial progress is expected in the future on these and other inventories.

Another major step taken in FY 1979 was the Smithsonian's assumption of responsibility for the Museum of African Art. This is significant for the future well-being of the Museum and for the National recognition and prominence which have been accorded traditional forms of African art. We look forward enthusiastically to the future of this fine Museum as a part of the Smithsonian.

Many new exhibitions were opened throughout the Institution in the past year. An exhibit, "The Dynamics of Evolution" opened in May 1979 at the National Museum of Natural History. Remarkably popular new exhibitions were held at the Cooper-Hewitt Museum, increasing attendance there to over 180,000 visitors. "Vienna Moderne, 1898-1918" explored Austria's Art Nouveau movement and was described in the New York Times as "the largest and finest exhibition of style ever presented in this country." Another was "Ma", of the "Japan Today" celebration observed across the country. The Freer also participated in these festivities with its fine Japanese Lacquer collection. Other very exciting shows produced throughout the Institution included the National Portrait Gallery's "Return to Albion". Future exhibit planning includes the National Museum of History and Technology's major exhibition focusing on the life and times of George Washington with funds requested in this budget. The new director of the Museum, Roger Kennedy, who is here today, is eager to improve the quality of the Museum's exhibitions with your support. Also during 1979, the new Beaver Valley exhibit area was opened at the Zoo. This exhibit, which includes an underwater viewing area of the sea lions as well as beavers and otters shown in simulated natural habitats, has been received enthusiastically.

Research continues throughout the Smithsonian, and results are published in the Institution's series publications, books, articles and monographs. The popularity of the Handbook of North American Indians has exceeded expectations, with the first two volumes, Indians of California and of the Northeast, sold out within a few months of their release dates. Work on the comprehensive, four-volume "Bibliography of the Arts in America" continued at the Archives of American Art, with publication expected this year. The joint Smithsonian Institution/University of Arizona Multiple Mirror Telescope in Mt. Hopkins, Arizona was dedicated officially in the spring of 1979 providing the nation with a significant new instrument for ground-based astronomy. A further major accomplishment of a scientific nature in the past year was the observation at the Radiation Biology Laboratory that determined that variability in the near-ultraviolet content of sunlight cannot be explained by ozone fluctuations alone, but is closely associated with weather changes and air pollution. These rather technical studies have enormous implications for basic and applied research studies in the years ahead. The National Air and Space Museum's major research program has recognized that there is a significant correlation between terrestrial features and those found on the moon and on planets such as Mars--findings which, with the aid of computers, scientists can shed new light on geological history.

The Smithsonian's bureaus won several awards of various kinds during the year. The National Zoo won five awards given at the National Convention of the American Association of Zoological Parks and Aquariums in St. Louis. Three were for excellence in graphics and two were in recognition of the Zoo's successful animal breeding programs. A film produced by the Office of Telecommunications and the University of Arizona, Mirrors on the Universe: the MMI Story, has been awarded seven CINE Golden Eagles and two CINDY Gold Plaques by the Information Film Producers of America.

Mindful of our responsibilities to serve the general public across the country including those persons who may not have opportunities to visit our museums, I would like to call attention to a sample of our activities supported with appropriated or nonappropriated funds. Our Traveling Exhibition Service had some 150 exhibits on tour consisting of 660 bookings in 48 states seen by an estimated 5 million persons. The number of Smithsonian magazine subscribers rose to 1.7 million. Under our National Associate Program, programs of lectures, music events, exhibits, and other activities were presented in six cities last year in collaboration with cultural organizations in those cities. We now have an extensive audiovisual series of slide-cassette and video tape presentations on conservation topics which are loaned to museums and related organizations. Our professional staff continued its long-standing tradition of helping to organize and participate in training programs for museum personnel across the country as well as many such sessions programmed on a regular basis here in Washington. Related to this national service to our sister organizations, I am pleased to report that the Institution's Native American Training Program helped to organize the North American Indian Museum Association which has clarified the needs of the constituent institutions and acts as a vehicle for solving their mutual problems. The Archives of American Art, which just celebrated its 25th anniversary, served 2,400 students and scholars in its regional centers.

The Institution's Trust funds help to support the continuing activities of the Institution in other ways. Our Resident Associate Program now has over 50,000 members. We and the public continue to be excited by the recordings produced by our Division of Performing Arts. Moreover, in addition to covering certain program and administrative costs, one of the major uses of nonappropriated resources is to fund a program of \$2 million annually, established by the Regents in FY 1978, for the purchase of acquisitions for the collections and for the support of scholarly studies and educational outreach programs.. We will use collection acquisition funds toward the purchase of the Gilbert Stuart portraits which will be exhibited for alternating three-year periods at the Boston Museum of Fine Arts and the National Portrait Gallery. Other major additions to the Collections also have been made through these funds, such as the sculpture L'Action Enchaînée by Artistide Maillol and a major collection of Chinese calligraphy.

With scholarly studies funds, the Smithsonian responded to fast-developing research opportunities such as the 1979 earthquake on St. Vincent Island where Smithsonian researchers were able to assemble data immediately following the quake. Using educational outreach funds we have started a new radio project this past year. We are preparing short features on activities at the Smithsonian for use, free of charge, on radio stations throughout the country. Ranging from descriptions of erupting volcanoes, to new exhibits at Smithsonian museums such as "Calder's Universe" at the Hirshhorn Museum and Sculpture Garden, to the revival of glass-blowing, these programs now have over 120 subscribing radio stations broadcasting in 38 states. The sources and uses of all funds are fully detailed in our budget document.

The Smithsonian has vigorously pursued energy conservation measures and has established specific goals through a new Energy Task Force, a 22-member group representing a broad range of the Institution's activities and organizations. Despite the fact that the consumption of energy has been relatively stable over the past few years, we are faced with skyrocketing utilities rates. The resultant costs have forced sizeable increases in our budget and also have eroded programmatic resources when appropriated resources have been insufficient to cover sudden rate hikes. By FY 1981, our utilities account is expected to amount to approximately ten percent of our Salaries and Expenses budget. To assure that we are doing everything possible to conserve energy, day-to-day operational measures are being adopted in each of our buildings and other actions will be taken such as promoting energy savings programs throughout the Institution and providing special training for building managers. Moreover, the FY 1981 and projected future budget requests for the Renovation and Restoration of Buildings Account include provisions for replacement of much of the existing heating, ventilating and air conditioning equipment which is obsolete, and consequently, a major source of energy inefficiency.

Budget Priorities

Our FY 1981 budget request for all appropriations totals \$137.4 million. This compares with estimated FY 1980 appropriations of \$144.9 million which of course includes funds of \$20.6 million to construct the Museum Support Center. Excluding the Support Center, we are seeking an increase of \$13.1 million for FY 1981 compared with the FY 1980 appropriation. Of the proposed increases, funds of \$5 million are devoted to expenses which are mainly beyond our control in the areas of pay, utilities, and inflation.

The priorities expressed in the Institution's budget request are the results of our five-year planning process and a thorough zero-base analysis. At this point, I would like to outline the major priorities expressed in the Institution's FY 1981 request and then proceed to explain them in detail by appropriation.

With the base resources included in our budget we will be able to continue the wide range of programs we conduct encompassing original research, collections management, exhibitions and performances, education, collections acquisitions, as well as administrative and facilities services. The new resources we are requesting will permit us to meet essential operating requirements, to build upon and strengthen many of the programs begun in prior years, and to undertake new initiatives.

A very high priority for FY 1981 is to continue our construction programs. These programs consist of continued development of the National Zoological Park, the restoration and renovation of buildings, and development of planning of the South Quadrangle.

The second area to which we would devote significant attention comprises several critical operational needs. Resources are sought to meet anticipated escalating utilities costs, Museum Support Center equipment and conservation training requirements, and the projected higher costs in FY 1981 of current staff. Also, funds are sought to help meet inflationary costs in the nonsalary categories of expense.

The Smithsonian Tropical Research Institute has had vastly increased responsibilities since the approval of the Panama Canal Treaty and enactment of the implementing legislation. It is important to match resources with responsibilities and, accordingly, we are proposing a sizeable resource increase for the Institute in FY 1981. The Director of the Tropical Research Institute, Ira Rubinoff, who has been involved directly with the changes resulting from the Treaty, is here with us today to answer your questions.

The new initiatives we are proposing for FY 1981 consist of a Major Exhibition Program for the history and art museums, especially for the National Museum of History and Technology and an interdisciplinary science program, the Smithsonian National Awareness Program. This latter program will focus on developing exhibitions and education materials to communicate information about the major problems confronting our ever more fragile natural environment.

Finally, we are requesting additional resources to strengthen individual programs of several organizations throughout the Institution.

Salaries and Expenses

For Salaries and Expenses, we are seeking an appropriation of \$120.3 million in FY 1981, an increase of \$11.8 million over the FY 1980 estimate.

This request would enable objectives to be met in four categories. These are essential operating needs; legislated requirements as a result of the Panama Canal Treaty and related agreements; the two new exhibition and science programs I have just noted; and particular needs of several of the bureaus and offices throughout the Institution.

Operating Needs

Under the general heading of operating needs, in addition to our pay, utilities and rental requests, we have been permitted for the first time by the Office of Management and Budget to seek additional resources to help compensate for inflationary increases in the nonsalary areas of expense. As with other museums and research organizations, inflationary increases are having the effect of seriously eroding exhibitions, research, collections management, acquisitions, and education programs as well as support services. Our request for \$1.2 million, calculated at a modest seven percent inflation rate between FY 1980 and FY 1981, would help these programs to maintain a current level of operations.

We are requesting in FY 1981 an amount of \$2,461,000 for the phased process of providing collections storage, conservation, protection, and other equipment for the Museum Support Center. Of this amount, \$1,701,000 is for collections storage, \$500,000 for conservation, and \$260,000 for security equipment. In arriving at these estimates, we have very much been in a learning process, especially over the past year as we have applied the planning funds provided by the Congress. This has been a year when important information and data have come together for the first time, particularly with regard to the storage component of this facility. First, the architect/engineers and their consultants impressively demonstrated to us that by decreasing slightly the square footage of the storage component of the building, increasing slightly its height, and installing a three-tier rack system with self-contained compartments--rather than continued use of traditional storage cases --we would realize over 25 percent more storage capacity than originally contemplated. This system, while not inexpensive, is less costly per cubic foot than all other systems studied. It will give us maximum dollar value and meet the growth of collections well into the 21st century, based on current projections. This new compact plan can easily increase the storage potential of the Center by some twenty years, more than our earlier predictions. Second, the installation of this system can be phased over the years as demanded by the space needs of the collections and the future growth of the collections. Its modular fabrication will permit great flexibility over time to rearrange collections storage components.

Third, as a result of the intensive collections inventory effort we have been conducting over the past two years, with special funds provided by the Congress, we have gained comprehensive knowledge of the many thousands of objects now in the Natural History collections that are stored in improper or delapidated cases, are deteriorating because they are too tightly stored, or are not stored in museum cases at all. The storage system we have now planned for the Support Center will allow us to correct these serious conditions. This new system will provide safe and accessible housing for the collections there. As an important dividend, many of the cases now in use, when their contents are relocated to the Center, will be used in the Natural History Building. They are needed there to meet storage needs of collections that will not be moved to the Museum Support Center and which are in desperate need of safe containment. This allows some flexibility in phasing the move. It also eliminates the need to spend several million dollars in the future to purchase cases for that building. I and my staff have given this plan intensive study and we are convinced that it offers the efficiency, flexibility, and long-term cost-effectiveness needed by the Institution.

Panama Canal Treaty - Related Requirements

As a result of the Panama Canal Treaty, its related agreements, and its implementing legislation, the Smithsonian Tropical Research Institute (STRI) must assume additional programmatic responsibilities, as well as administrative costs, and we are seeking an additional \$472 thousand to meet these responsibilities. The most profound changes result from the fact that Barro Colorado Island has been designated as a Nature Monument and its area extended from 3,900 to over 12,000 acres. STRI has been designated as custodian of the Barro Colorado Island Nature Monument. With this responsibility comes significant security requirements and enhanced conservation and educational opportunities. In the administrative area, new laws and regulations, along with the phasing out of services previously available from the Panama Canal Commission and the Department of Defense, make the need for additional resources unavoidable.

New Programs

The proposed new Major Exhibition Program for which \$1 million is requested will be launched with two important shows. A definitive exhibition reexamining George Washington's place in our history on the 250th anniversary of his birth in 1982 will be held in the National Museum of History and Technology. "Celebration", our first comprehensive display of folk objects drawn from all the Smithsonian's museums, will be held in the Renwick Gallery. We have not requested new resources for substantial new exhibitions since the Bicentennial, because emphasis over the past several years has been on critical collections management needs. It is time, however, to breathe new life into our exhibit halls, drawing principally upon the National Collections and the resources of our staff in a variety of disciplines.

The Smithsonian National Awareness Program for which we are seeking \$600 thousand will gather together the most up-to-date information on significant current issues in science, using the varied resources of the Smithsonian science bureaus. The Program is designed to bring to the attention of the public the major problems facing the life support systems of the earth, particularly such factors as energy and the environment. Drawing upon research findings, it will begin with two exhibitions and related educational materials. One of these, "The Sun and Energy" at the National Air and Space Museum, will present innovative displays on energy conservation and development using new technologies. The second, to be installed in one of the largest halls of the National Museum of Natural History, is entitled "Man and Planet Ocean". This exhibition will address the subjects of pollution, conservation, and energy in a comprehensive and educational manner. Educational materials based on these exhibits will be distributed to educators and students throughout the country.

Selected Individual Requirements

Finally, under the Salaries and Expenses appropriation, we are seeking \$2.2 million to strengthen programs of research, collections management, exhibitions, including performances and festivals, and education and research organizations throughout the Institution. This amount also would be used to strengthen our protection services and continue to make improvements in our administrative support.

To further original research, we are proposing additional resources to provide base funding for the watershed monitoring system at the Chesapeake Bay Center for Environmental Studies; to establish a telescope detector development program at the Smithsonian Astrophysical Observatory; to strengthen the nationally respected nineteenth century American Art program at the National Collection of Fine Arts; and to enhance other areas of Smithsonian "increase", such as museum studies.

Collections management and inventories continue to be a high priority. We are requesting additional resources for urgently needed paper and textile conservators at two history and art museums and for expanded collections inventory work at the Museum of History and Technology. Also, funds proposed in this budget will allow us to increase public accessibility to the library collections of the Cooper-Hewitt Museum and to prints and photographs collections of the National Portrait Gallery. Additionally, we propose to develop a catalogue of about one million photographic negatives to improve greatly the Institution's ability to provide visual materials to the public.

For exhibitions and performances, in addition to the major new initiatives I have described, we are seeking funding to allow the Freer Gallery of Art and the National Portrait Gallery to open additional exhibitions and to increase public performances in the Museum of History and Technology using its important collection of musical instruments.

In the area of education, we plan to build upon our progress in providing information services to the public, and to strengthen the very successful program developed by our Office of Elementary and Secondary Education to make the museum experience more accessible to disabled visitors.

We are proposing a small, but significant, increase for collections acquisitions at the National Portrait Gallery. We also hope to establish a much-needed Federal acquisitions base at the Museum of African Art.

Finally, for administration and facilities services, we are requesting funds for the Office of Equal Opportunity to establish an Institution-wide cooperative education program in order to improve our ability to locate and place minorities and women in professional positions. Another continuing critical need is the augmentation of our guard force. Our FY 1981 budget request proposes improvement of our protection services capabilities. We expect to continue to seek additional staffing for this purpose in future budget years. Our Office of Facilities Planning and Engineering Services is represented in this budget in line with our priority to devote increasing attention to the restoration and renovation of our buildings. Following up on management improvement efforts begun over the past few years, we are seeking to strengthen our accounting, audit, and legal services capabilities.

Construction

The projects contained within our construction appropriations are of high priority to us. These include continued development of the National Zoological Park, the restoration and renovation of our buildings, and the planning for the South Quadrangle.

The National Zoological Park is becoming one of the world's finest with its new and renovated exhibits, its research facilities and its highly trained and able staff to deal with all aspects of animal care. Millions of people already have experienced the pleasure of viewing the animals in their new environments. With the opening of the Great Ape House scheduled during 1980, the renovation of the Reptile House and the Crocodile exhibit scheduled to begin shortly, and the proposed new Monkey Island exhibit, the cluster of projects in the so-called "central area" of the zoo will be completed. For FY 1981 we are requesting a sum of \$3.3 million for construction of the Monkey Island exhibit at the National Zoological Park, and for renovations, repairs, and improvements of facilities at the Zoo's Conservation and Research Center in Front Royal, Virginia and at Rock Creek.

It is gratifying to report that work outlined by the Rock Creek Master Plan is more than halfway completed. Twenty-one projects are completed or under construction.

For the FY 1981 Restoration and Renovation of Buildings appropriation, we are seeking \$8.8 million. As we explained at last year's hearings and detailed in our Five-Year Prospectus FY 1981-1985, the needs covered by the appropriation are considerable. It is important to bring Smithsonian facilities up to necessary standards to meet requirements of health and safety and for proper protection of the National Collections. Museums should be places where visitors derive pleasure from viewing the collections and learning about what they symbolize or what they can tell us about our own history. To promote this sense of excitement, however, the physical condition of the museum must be sound. Of course, the proper care and protection of the National Collections are ample reasons to maintain the Institution's facilities. The interior climatic environment must be stabilized so that objects in the collections do not become damaged. In undertaking any necessary renovations to achieve environmental stability, we are assuring also that newly installed systems will meet energy efficiency standards. Visitors and staff safety and security also demand that facilities are in proper repair. There is now also greater awareness and attention to the needs of disabled persons, as manifested in recent legislation. Finally, there is a need for projects in support of programmatic work at outlying bureaus. Our restoration and renovation request in FY 1981 as well as future plans in the Five-Year Prospectus have been developed according to categories that will meet the objectives I have just outlined.

The final portion of our budget request consists of planning funds for development of the South Quadrangle, an area of approximately 4.2 acres bounded by the Smithsonian Institution Building, the Freer Gallery of Art, the Arts and Industries Building, and Independence Avenue. Our proposal for development of the Quadrangle is based on the need to strengthen certain areas of our collections and exhibits program and to provide additional services to the public. This includes provision for new space resources for the display of oriental art and for meeting the space requirements of the Freer Gallery of Art for conservation, libraries, research, and education. The legislative history of P.L. 95-414, the bill authorizing the Smithsonian's acquisition of the Museum of African Art, suggests that the Museum be moved from its present location on Capitol Hill. The normal growth of this museum's excellent collections and the need to improve visitor accessibility ultimately will require this step. A Mall site suitable for this new national museum would be efficient and more accessible to the public.

Legislation authorizing the appropriation of \$500 thousand for planning purposes was enacted and signed into law by the President on July 20, 1979 (P.L. 96-36). In the current fiscal year, an amount of \$500 thousand of the Institution's Trust funds is being used to refine preliminary conceptual information developed previously. This includes the preparation of architectural concept drawings and the development of materials in connection with the National Environment Policy Act, the National Historic Preservation Act, and a variety of technical requirements.

For FY 1981, the requested amount of \$500 thousand in appropriated funds combined with approximately \$1 million of nonappropriated Trust funds would be used to sustain planning and design activities. During this period, tentative design drawings would be prepared for review and the development of working drawings and specifications would begin.

Presently, much groundwork for private support of this project has been laid in meetings with representatives of Asian and African organizations and governments, and the Institution remains hopeful about raising significant sums. A substantial amount of the Institution's Trust funds derived from auxiliary activities also will be applied to the overall cost of the project.

Special Foreign Currency Program

The final appropriation account in our budget request is for the Special Foreign Currency Program. An amount of \$3.7 million will be used to continue a program of grants to United States' institutions for field research in specialized areas. This is the same amount that was appropriated for the grants program in FY 1980. An additional \$750 thousand equivalent in rupees will be added to the forward-funded reserve already established by the Smithsonian for the American Institute of Indian Studies.

These programs are all more fully detailed in our budget document. I and my staff will be happy to respond to questions.

Biography of Christian C. Hohenlohe

Christian C. Hohenlohe was appointed Treasurer effective July 1, 1979.

Mr. Hohenlohe has been associated with the Institution for 8 years, serving as assistant treasurer and earlier as executive assistant to the Secretary.

Before coming to the Smithsonian, he served on the staff of the Subcommittee on Administrative Practices and Procedures of the Senate Judiciary Committee.

Mr. Hohenlohe is a native of New York City. He is a graduate of Harvard University and the Georgetown University Law Center.

Biography of Tom L. Peyton, Jr.

Mr. Tom L. Peyton, Jr. was appointed Director, Office of Facilities Services, effective April 29, 1979.

In this position, Mr. Peyton serves as the principal advisor to the Assistant Secretary for Administration, the Under Secretary, and the Secretary on all aspects of facilities development and their support. He also directs and coordinates the programs and activities of the offices of Facilities Planning and Engineering Services, Plant Services, and Protection Services.

Mr. Peyton is an engineering graduate of the Virginia Military Institute and of New York University. He had been with the General Services Administration since 1965 where he served as Deputy Assistant Commissioner for Project Management of the Public Buildings Service.

Biography of Roger G. Kennedy

Roger G. Kennedy was appointed Director, National Museum of History and Technology effective October 1, 1979.

In 1953, Mr. Kennedy served as Special Assistant to the U.S. Attorney General. From 1954 to 1959, except for a period in 1959 when he was Special Assistant to the Secretary of Health, Education and Welfare, Mr. Kennedy was a Washington and European correspondent, producer and public affairs broadcaster with the National Broadcasting Company. In 1959, Kennedy served as Special Assistant to the Secretary of Labor. He then joined the Northwestern National Bank of St. Paul, becoming chairman of the executive committee and director. In 1969-70 he was vice president for investments and executive director of the University of Minnesota Foundation. Kennedy joined the Ford Foundation as vice president for finance in August 1970 and has been vice president in the Office of the Arts since October 1977.

He is the author of two books, Minnesota Houses (1967) and Men on the Moving Frontier (1969) as well as numerous articles for professional and other journals. He was a recipient of the Minnesota Historical Society's Solon Buck award for regional historical writing and in 1967 was honored by the Minnesota Society of Architects for his accomplishments as an architectural historian.

Mr. Kennedy, a native of St. Paul, Minnesota, after serving in the Navy during World War II, graduated from Yale University and the University of Minnesota Law School.

Biography of Phillip Samuel Hughes

Mr. Phillip Samuel Hughes was appointed Under Secretary effective February 4, 1980.

Mr. Hughes, a native of Chicago, holds a B.A. in sociology from the University of Washington, where he continued graduate work. After service in the Army and Navy in World War II, he worked for Boeing Aircraft in Seattle and for the Veterans Administration. He came to the Bureau of the Budget in 1949 and held a series of increasingly responsible positions until his retirement in 1969 as deputy director. Since then, Mr. Hughes has been acting president of the National Institute of Public Affairs, a senior fellow at the Brookings Institution, Director of the Office of Federal Elections in the General Accounting Office, Assistant Comptroller General of the United States, Assistant Secretary in the Department of Energy and consultant to the National Academy of Public Administration. He has received the National Civil Service League Career Award, Bureau of the Budget Award for Exceptional Service, Rockefeller Public Service Award and the Comptroller General's Award.

Biography of Ira Rubinoff

Ira Rubinoff has been Director, Smithsonian Tropical Research Institute in Panama since January, 1974. A specialist in the ecology and evolution of marine fishes and sea snakes, Dr. Rubinoff began work with the Institute in 1965 and has served as Assistant Director for Science at STRI since 1971. He has served on the Committee on the Ecological Effects of a Sea Level Canal.

Dr. Rubinoff holds a B.S. degree from Queens College, Flushing, N.Y., and M.A. and Ph.D. degrees from Harvard University. Before coming to the Smithsonian he was employed at Harvard as a teaching and research fellow and assistant to the curator of fishes in the Museum of Comparative Zoology. He is a member of a number of scientific societies including member of the Board of Directors of the Charles Darwin Foundation for the Galapagos Islands and Trustee of the Rare Animal Relief Effort. He also is a fellow of the Linnean Society of London and an honorary fellow in ichthyology at Harvard.

PRESENCE OF BUREAU DIRECTORS

Mr. YATES. This is the first time—you are usually accompanied by your Under Secretary, but I didn't remember if you had ever brought the Director of the National Museum of History and Technology in before.

Mr. RIPLEY. No, sir. He particularly came this morning to testify, in case the Committee would like it, on the question of special exhibits which he hopes to inaugurate during the coming year.

Mr. YATES. We are very happy that you did. As a matter of fact, we would be happy if you brought them all, all the Directors.

Mr. RIPLEY. Mr. Rubinoff is here to testify in connection with the developments in Panama.

DISCUSSION OF OPENING STATEMENT

Mr. YATES. I have read your statement. I must say it's the most condensed statement for all the activities of the Smithsonian I have seen. It's what I would call a series of one-liners, because you dispose of each activity with one sweeping assertion.

Mr. RIPLEY. It is. That's quite true. It seems hard to pack it all into one package.

Mr. YATES. What do you want to tell us yourself? Just tell us about the Smithsonian, what it's done in the last year, and what your problems are, and what you hope to do next year.

Mr. RIPLEY. Well, I would like, if I might, Mr. Chairman, to highlight a little bit about what we have been doing.

SOUTH QUADRANGLE DEVELOPMENT

Mr. YATES. Are you going to tell us about the quadrangle building?

Mr. RIPLEY. Yes. We brought the plan of it here today.

Mr. YATES. Have you seen it, Jack?

Mr. MURTHA. No.

Mr. YATES. When we get to the quadrangle building you will see what is called the Ripley dream.

EXHIBITS AT THE HEARING

Mr. RIPLEY. I have a number of exhibits here, including "show and tell," so-to-speak, exhibits which I would like to highlight.

Mr. YATES. I see the rhinoceros horn up there.

SMITHSONIAN NATIONAL SERVICES

Mr. RIPLEY. Yes, indeed. I have got a value for it. I think you might be interested to know more about that and some of the plants that we also brought today. We have also brought today a chart which has just been prepared to show you the kinds of things, Mr. Chairman, we have been doing across the country. In my annual report last year, and again this year, I have been talking about what is traditionally called, I suppose, nowadays the outreach activities of the Institution across the country. Normally we are thought of as being a collection of museum-like structures on the mall. And few people, I think, realize the dimension of the

kinds of things that we are doing around the country for the country as a whole.

OBJECTS ON LOAN

We have loans out from our collections in Science, History, and Art, and the Zoo. The loan category is colored there with a particular dot. I think it's the top dot. Approximately one and a half million objects and specimens are out now in 41 states.

Mr. YATES. What does this mean? Give us examples of the kinds of objects that are on loan.

Mr. RIPLEY. This ranges from paintings or sculpture which are on loan to other museums to collections of mollusks, insects, invertebrates, birds, mammals from the Natural History collection, to historical objects that have been loaned either for study, research, or particular exhibitions.

And a certain number of other miscellaneous objects in the realms of biology, astronomy, and astrophysics; specimens of meteorites being tested at special laboratories at NASA, for example, in Texas, the California Old Woman meteorite, which is being sawn now to discover what sort of minerals are contained in it, the major part of which will then go to Los Angeles. We have traveling exhibits, which are a particular concern of ours. The Smithsonian traveling exhibits, through SITES, are now shown in 48 states.

SMITHSONIAN INSTITUTION TRAVELING EXHIBITION SERVICE

Mr. YATES. Do you by any chance have a copy of your SITES catalogue here?

Mr. RIPLEY. Yes, sir. I brought the UPDATE catalogue here.

Mr. YATES. The SITES catalogue is one of the most beautiful things you ever saw. Have you ever seen that, Jack?

Mr. RIPLEY. There it is, right there. We now have exhibits touring in 48 states, from Alaska to Hawaii and out to the east coast, 366 cities and the District of Columbia. About 150 shows are on tour at any one time. Of course, the total impact on the population is very large just in this category.

ASSOCIATES PROGRAM

With regard to Associates regional events, the Associates organization has city events each year in particular cities. In 1979 we had these regional events in San Diego, Atlanta, Denver, Philadelphia, and New Orleans. Nine more cities are planned for 1980 in Florida, Texas, Iowa, Missouri, Alaska, and Hawaii. These events bring very large groups of the Associates into contact with the people who come who play, say, musical performances or to give lectures relating to exhibitions showing in that particular city at the time. They involve the cultural centers, museums, galleries, historical societies in each one of these cities. And we find that they are greatly welcomed by these community organizations because they bring in Associates who often are not members of the particular city organizations, and thereby attract memberships to their own organizations.

Our theory in all of this is: patronize your neighborhood grocery store, come to your city's finest local institutions and enjoy them and learn more about them in the process.

Mr. YATES. I didn't know there was a neighborhood grocery-store around anymore.

RADIO AND TELEVISION PROGRAMS

Mr. RIPLEY. It's surprising in the cultural field how many of them there are. Often local people who live in such a community simply go out and live in a nearby community, simply drive in and out, commute, and don't patronize their own art institutions.

We have a new program of our own, the Smithsonian News Service. Articles on the Smithsonian and related subjects, are used by newspapers and magazines.

They have appeared so far in 137 newspapers in 35 states, with a combined total circulation of five and a half million. We believe this reaches about 33 million people at the present time. We have Radio Smithsonian which broadcasts now through almost 70 stations across the Nation; a new offspring called Smithsonian Galaxy, two and a half minute features, that are put into 123 radio stations; and two television programs which have been shown by 100 stations.

SPECIAL FOREIGN CURRENCY GRANTS

We have the foreign currency grants which you know a great deal about, Mr. Chairman, which now are awarded to educational, or have been awarded recently, to educational institutions in over 25 states. And we have the Museum Program training opportunities, both with Native Americans and with other museum groups around the country, which go into the field for professionals for museums in all the states and the District of Columbia.

ELEMENTARY AND SECONDARY EDUCATION MATERIALS

We have elementary and secondary education materials, a leaflet series, one of the most popular of which is called "Art To Zoo", which goes to about 13,000 schools in all the states and the District of Columbia, and also abroad. It goes to the Armed Services abroad and to a number of the ICA organization regional libraries, and so on. It's extremely popular and very well received in the schools.

OTHER OUTREACH PROGRAMS

So these kinds of things are some of our outreach programs of which we are so proud and which we feel make an impact on approximately a quarter of our population every year. We have new handbooks of North American Indians, the first two volumes of which, in the Bicentennial program series, have already sold out. As you will recall from past years, when we got the grant connected with the Bicentennial to establish "the Handbook of North American Indians" we planned on some 20 volumes in total. I am pleased to report in that connection that our native American training program has helped to organize the North American Indian Museum Association, which has clarified the needs of con-

stituent museums. We have training curators that go out to serve in Native American museums.

The Magazine is working very successfully as a kind of vehicle for the Associates and now has over 1.7 million members. The book programs organized to follow the Magazine are doing well, although recently, due to the inflation and the question of the economy, our book sales have measurably declined. But we are restudying that with an outside ad hoc publishing group from the publishing field, including members of our own Smithsonian Council. We will be attempting to see how best to increase the impact of these books. All of these are done, of course, with trust fund expenses.

REQUEST TO CONGRESS

Our budget request is, we think, a modest one this year. In all appropriations it totals \$137.4 million. With the base resources we will—

Mr. YATES. It's the least modest one of all the years, isn't it?

Mr. RIPLEY. It's ahead of last year, yes. It is the least modest. That's perfectly true. But we think it's modest in terms of the worth and the value of inflation at the present time.

Mr. YATES. And modest in terms of the services that are performed?

Mr. RIPLEY. Yes, definitely. We are essentially involved this year in housekeeping, research, collections management, exhibitions and performances in connection with them, and general education, and some collections acquisitions, as well, of course, as the built-in costs of administrative and facilities services.

REVISED PRESIDENTIAL BUDGET

Mr. YATES. Were you called upon to make any reductions in the new Presidential budget?

Mr. RIPLEY. The current Presidential budget which is being studied?

Mr. YATES. The new one, the revised one.

Mr. RIPLEY. The revised one is being revised and it's still under discussion, and we have no firm figures on what the OMB is requesting that be cut out of the official 1981 budget.

Mr. YATES. Did the OMB ask you to recommend reduction?

Mr. RIPLEY. They are discussing that with us now, but we haven't come up with it.

Mr. YATES. You haven't made any suggestions to them?

Mr. RIPLEY. Jon Yellin is here and is in close touch with that.

Mr. YATES. What's the answer, Jon?

Mr. YELLIN. Well, we haven't made any specific recommendations to them. There is discussion underway at the present time for a possible 1980 and 1981 reduction, and a possible reduction to our pay supplemental request for 1980.

Mr. YATES. You don't know what amount?

Mr. YELLIN. I don't know what the amounts are right now.

Mr. YATES. OMB hasn't indicated what it's likely to ask for?

Mr. YELLIN. They have given us some ideas for 1981 that there possibly could be something like a two percent across-the-board cut to our operating budget. There could possibly be a ten percent or

less percent cut to our pay supplemental for 1980. In addition to that, there are some discussions of outlay deferrals.

Mr. YATES. Go ahead, Mr. Ripley.

CONSTRUCTION APPROPRIATION REQUEST

Mr. RIPLEY. We are asking for some construction money for the Zoo: \$3.3 million for the Monkey Island exhibit and for renovations, repairs, and improvements. We are asking for general restoration and renovation of buildings. The principle appropriation request this year is \$8.8 million. We feel that this is necessary as part of a program that we developed with this Committee several years ago emphasizing the importance of the restoration of these old buildings and also the comfort and safety of the visitors and the staff. We have some projects in support of the programs that are outlying facilities as well. But this is part of the budget which we can describe in detail.

SOUTH QUADRANGLE BUDGET REQUEST

Finally, we have a small item in our 1981 budget for planning for the development of the South Quadrangle, and this we lay great stock by this year because we feel that we must develop a measure of support it we are going to go ahead in terms of the fund raising that we are undertaking from the private sector.

We have great ambitions for that Quadrangle in terms of the services it can perform for the public at large and for the specialized collections in Asian Arts, and in African Arts in connection with the new African Art Gallery. We have outreach programs to focus in the underground parts of the Quadrangle which are of immense importance in continuation of the kind of things that I have been describing in that chart of the United States.

OPERATING REQUIREMENTS

We have an estimate of \$2.6 million to meet escalating utilities and space rental costs, which we think by the fiscal year 1981 will comprise approximately ten percent of our Salaries and Expenses budget, and we hope to meet the projected salary costs in 1981 of about \$1.2 million. We are requesting funds for the phased process of providing collections storage, conservation, protection, and other equipment for the Museum Support Center.

MUSEUM SUPPORT CENTER REQUIREMENTS

About \$1,700,000 of this is for collections storage, \$500,000 for conservation, and \$260,000 for security equipment. This has been the result of a very, very, intensive discussion with the staffs, with security specialists, with people who are specialists in storage equipment, and we think that we have finally arrived at the most cost-effective system which will allow us to increase the capacity of the existing planned building by approximately 25 percent more storage than we originally contemplated.

This, of course, requires intense study which continues and will continue until the building is built. We believe that we will get

maximum dollar value and greatly increase the length of life of the building to absorb additional collections material.

So, we are pleased with where we have gotten so far, even though we feel that the immediate impact of this in getting essentially more specialized storage equipment will be greater than we anticipated.

COLLECTIONS INVENTORY

We have great results now on the collections inventory which Congress asked us to start over two years ago. We are beginning to get a grip on the understanding of the millions of objects now in the Natural History collections, many of which are stored, of course, out in the open, as you have seen in demonstrations that we have had of our equipment situation in that museum, or in delapidated or deteriorating cases, or too tightly stored. We think that with the development of the Museum Support Center we will be able to get a much better rearrangement of the objects that are going to be staying in the Museum, so that they will be better housed in the cases that are already there when we begin to relieve some of the intense pressure that has been building up over the years.

I have continually gone back to my colleagues in that museum and through Mr. Perrot to the organizing staff to say I want to be absolutely sure that every case that is usable is being properly used or renovated for use and that we are not wasting a single bit of either the money or the space which we have committed ourselves, through your help, to reorganize.

CHANGE IN DESIGN PLANS OF THE MUSEUM SUPPORT CENTER

Mr. YATES. I notice in your statement you have an explanation of the change in your square footage in the building.

Mr. RIPLEY. That is right, sir. We have discovered that by reducing the size of the square footage slightly and increasing the height of the space slightly, we can get these special self-supporting cases to hold a great deal more. We have designed structures which we could bring in later in the hearing, if you would like to see them, which actually illustrate for you how this compacted storage would work.

It's entirely a novel system for us, but we believe that it will both extend the life of the building in terms of its ability to store things, and receive more storage things, and it will extend the amount that we will be able to put in the building, and therefore extend the estimated number of years in which we think it will be full by a very considerable measure.

COST OF MUSEUM SUPPORT CENTER CONTRUCTION

Mr. YATES. Has there been any increase in your estimate as to the cost of the building?

Mr. RIPLEY. Not to the cost of the structure itself, but there is, of course, a phased expense which is going to involve the things that are going into it, that is the special self-supporting structures that will house the objects.

Mr. YATES. We will hear more about that later I assume.

PROGRAMMATIC BUDGET REQUESTS

Mr. RIPLEY. Yes. As I have said earlier, we have brought, Dr. Rubinoff up from Panama to discuss the Tropical Research Institute and we have Mr. Kennedy here to discuss some of our exhibits mentioned in the 1981 budget. We feel that a major reason for studying the Museum of History and Technology, its organization and its exhibit problems, is to make sure that in the coming years we can have a dramatic and greatly improved program developed on exhibitions there. The George Washington exhibition is one on which the Museum, and its staff, and the Director have made plans for developing this year, as well as a very comprehensive display of folk objects to be held in the Renwick Gallery drawing on objects from all our museums.

We also, in science area, are hoping to build up the first increment now of a changing exhibition program involving national awareness which will be built on our own information and knowledge about the environment and the changing environment.

We feel that would be a tremendous educational asset for the future. We are developing our collections management, as I have said. We have a total budget of about \$2.2 million requested this year for individual programs of several of the organizations in connection with collections management, research, and other aspects of their particular programs, also our protection services.

VALUE OF THE COLLECTIONS

We continue to be much concerned about the increasing value of our objects. I just thought I would bring along for you here a small object the size of a postage stamp which gives you some example of the kinds of things that are in the Museum of History and Technology. That is a \$20 gold bar weighing a little over an ounce, dated 1867, and worth \$20 in its actual currency at the time. It's now worth as of today's market over \$500.

Mr. YATES. How many of those does Mr. Kennedy have?

Mr. RIPLEY. Mr. Kennedy has more than one.

Mr. YATES. I take it his experience as a banker will help him in this respect.

Mr. RIPLEY. I hope his experience in almost every capacity will help him, considering what on earth to do about stamps, coins, all these sorts of things which at any moment we realize we are potentially vulnerable to losing.

Mr. YATES. How many gold pieces like that do you have? Maybe we ought not put it into the record. You will have to increase your security.

Mr. RIPLEY. That's the problem. Even bringing this here today was potentially dangerous for me to do. But I can't begin to say that this is as valuable as those two rhinoceros horns back there you see up on the book shelf, for example, another problem of ours.

You see up on the book shelf behind me, and in front of yourself, another problem, rhinoceros horns. In 1969 the black rhinoceros, the larger of those two horns, were estimated to be some 20,000 living individuals in Kenya. Today it's estimated in 1980 that there are less than 1,000. The culling of these animals alive for the horns

has been proceeding at a massive rate, particularly in Kenya, but also in other parts of Africa.

We have an estimate that the larger of those two horns in today's market is worth \$91,780. The smaller one is worth \$78,000 in today's market.

Mr. YATES. As you inventory your 75 million objects plus do you also have an appraisal of the value?

Mr. RIPLEY. No, I don't think so, because I don't think we want to really. We don't want to emphasize the value of many of these things.

That's why I really hesitate to say how many pieces of gold that we have.

Mr. YATES. We keep hearing stories about the government being bankrupt. When we stop and think of the value of the objects that the government owns it's very difficult to conceive that we are bankrupt. I assume the value of it is equal to the National debt.

Mr. RIPLEY. I would think that the value of the objects that, not only the Smithsonian, but all the other places that collect objects—and as you know, Mr. Chairman, they are manifold. It is certainly somewhere close to the value of the National debt. We have no firm way of guesstimating what the total value of our objects is. I have merely guessed several years ago that if you were able to invest that sum we would have an income in excess of four times as much as our federal appropriation is.

Mr. YATES. Wasn't there some discussion among the Regents some years ago that had the Regents invested in the art that was in the museums, that they would have done better than buying the stocks and bonds?

Mr. RIPLEY. That is true. In fact, one of our Regents has urged us to look into this much more seriously than we have. Our difficulty is that we administer and control our objects and to buy and sell and invest in them seems somehow a travesty of what we are all about as keepers of the Nation's collections. But it is very tempting. I have another interesting example of Mr. Roger Kennedy's proposed exhibition on George Washington here.

GEORGE WASHINGTON'S ELECTORAL BALLOT FOR MARYLAND

This is a federal election ticket. It's the first one. It gives you some indication of the depth of the historical collections in the Museum of History and Technology.

Mr. YATES. Can you explain this a little better? First District of what?

Mr. KENNEDY. Of Maryland. You drop that in the slot, Mr. Chairman, when you cast your vote. There was no privacy at that point.

Mr. RIPLEY. It's rather like elections in some of the third world countries today.

Mr. YATES. There is no choice, you just vote for them all?

Mr. KENNEDY. Yes, sir. A very orderly process.

Mr. YATES. These are the Presidential elections for Washington. I don't think anybody ran against him, did they?

Mr. KENNEDY. Yes. On the second time out.

Mr. MURTHA. This was the electoral college then; is this what they were electing in the electoral college?

Mr. KENNEDY. You voted for the electors.

GEORGE WASHINGTON'S DRINKING CUP

Mr. RIPLEY. This object, Mr. Chairman, is George Washington's drinking cup.

Mr. YATES. Well, he wasn't much of a drinker, was he.

Mr. RIPLEY. It may, of course, have been something he took his medicine with.

Mr. YATES. I am inclined to think that's true.

Mr. RIPLEY. But, perhaps, it's what was then known as a tot.

Mr. YATES. You brought us some nice objects to look at. And those are going to be exhibited in the Washington show?

Mr. RIPLEY. Those are in the proposed Washington show.

COST OF PRODUCING EXHIBITIONS

Mr. YATES. Why a million dollars for two shows? Isn't that a lot for two shows?

Mr. RIPLEY. We don't think so. A show nowadays—the kinds of shows that you see in the gallery, let's say the National Gallery or one of the major art museums—will run anywhere from \$800,000 to a million dollars for one. So, a historical show inevitably seems somehow rather cheap in comparison.

Mr. YATES. Will you be using your own objects or will you be using the exhibits to which you referred, and draw objects from all over the world?

Mr. KENNEDY. We will be doing things predominantly with our own collections, but there are additions that will come up from elsewhere. The objective is, of course, not merely to do a show but to relate the rest of the museum to the extent possible to this theme. Which means that you upgrade a lot more space than you are describing just in that square footage.

Mr. YATES. If you look at the National Gallery's cost per show, the cost of a show is about \$150,000.

Mr. RIPLEY. Well, those are not major exhibits in the sense of the size of them.

Mr. KENNEDY. The question is cost per square foot, Mr. Chairman.

Mr. BLITZER. We have some figures on page A-140 of our justification. There is a real difference between the paintings that are hung on the wall and a show of three-dimensional objects, which would be a much more elaborate kind of installation. The Pacific Islands show at the National Gallery costs \$990,000. Simply to assemble King Tut at first cost \$750,000 plus two of three hundred thousand for each museum to install it.

Mr. KENNEDY. It's a question not so much of the aggregate cost, though it is true that large shows cost a lot of money, but how much is spent per square or cubic foot to do the job. These figures are emphatically in line with each of the shows to which you referred per square foot.

COST OF MUSEUM OF AMERICAN INDIAN'S SHOW

Mr. YATES. How much did the Museum of the American Indians show at the Customs Building cost?

Mr. KENNEDY. I can give you only a guess, but it will only be a best guess. Why don't we give you a report on that.

Mr. YATES. I knew that you had some contact with it and I thought you might know.

Mr. KENNEDY. Yes, sir, it is true that I did make some grants in another capacity toward that show and they would support these kinds of numbers, but I am hesitant to give somebody else's figures to you.

"CELEBRATION"—FOLK ART

Mr. BLITZER. Still under the heading of major exhibitions, the other one described in our budget here is the "Celebration" exhibition which is designed to fill the entire Renwick Galley for a year. You had asked whether these would be from our own collections or borrowed. The point of the "Celebration" exhibition is to gather from all the Smithsonian museums things of folk art and folk culture.

So this would be composed solely of our own collections. This was suggested by an advisory group that we have in the area of folklife.

Mr. YATES. If you have no inventory how do you know what's in your collections?

Mr. BLITZER. Well, actually one of the reasons that we put about \$125,000 in trust funds into this exhibition this year, because we really are so excited about it, is to hire some people who will work with our curators in the various museums and the various divisions identifying objects for use here.

It will be enormously easier, when all of this is done and we have the inventories and everything is on the computer, to do this kind of thing.

Mr. YATES. That's a very good explanation.

Mr. RIPLEY. Well, Mr. Chairman, that's a very cogent question, because some folk objects are enormously hard to identify. I found and gave to the Museum of History and Technology last year an object which consisted of a little wooden box, two pieces of string coming out of it, and one end a thing that looked like a clam shell, and at the other end looked like a quill. It took the museum curators almost two weeks to decide that it was a very early turkey call from south Georgia, possibly from late revolutionary times. I didn't know what it was myself but I knew it was odd, and presumably a folk object.

Mr. YATES. Was it still useable?

Mr. RIPLEY. I couldn't make it sound like anything at all.

OPENINGS OF THE TWO MAJOR HISTORY AND ART EXHIBITIONS

Mr. YATES. We look forward to it. When are you launching it, in 1982 for George Washington, and the same year for Renwick?

Mr. KENNEDY. Yes, sir.

Mr. YATES. How much will it cost in fiscal 1982 for the two exhibits, if you want a million dollars for 1981?

Mr. BLITZER. I have to correct something. The Renwick show would open in August, 1981.

Mr. KENNEDY. Washington opens the early spring, February 1982, so the money gets spent in 1981.

Mr. YATES. On his birthday?

Mr. KENNEDY. It opens on his birthday.

Mr. YATES. Good planning, Roger.

Mr. BLITZER. The expenses for the Renwick Celebration show in 1982 will be small, maybe \$50,000, and I suspect it can be absorbed by the NCFA's exhibition budget in 1982, if we get this money in 1981.

Mr. YATES. How is NCFA involved?

Mr. RIPLEY. They administer the Renwick Gallery.

Mr. YATES. How long will these exhibitions last?

Mr. BLITZER. It will be one year, from August, 1981 to August, 1982.

Mr. YATES. How long will George Washington last? Will it be a traveling exhibition?

Mr. KENNEDY. Portions of it can travel, but the core of it stays in place for a number of years, at least I should say three of four. But we are also going to be relating other parts of the museum to that show. In fact, that's the primary objective, to use it as a lever to upgrade other related areas as well.

ORCHID DISPLAY

Mr. RIPLEY. I would just like to bring something else up here. We have never showed the Committee, Mr. Chairman, some of the living objects that the Smithsonian is working with. I did want to show you these as an example of the fact that they are extremely interesting. They are all orchids. And in the past ten years with the development of—

Mr. YATES. Did they come up with Mr. Rubinoff?

Mr. RIPLEY. No. Three of our curators were in Panama in Mr. Rubinoff's facilities last December and they collected this and two of the other objects, this one here [indicating] and I think this one [indicating]. These are all endangered species and the Smithsonian had the responsibility of maintaining a list of endangered species of plants in the United States primarily and also serving with the Department of Agriculture and Department of Interior as a kind of guide to the question about importation and study of orchids.

The habitats of these species are being destroyed at a fantastic rate, even as we sit here, by slash and burn agriculture, forestry practices, grazing, all the sorts of development which is going on relentlessly in the tropical areas around the world.

So, we in some cases hope to save species, as it were, in artificial conditions as potential gene pools for the future, hoping that at some time of these species can be reestablished in national parks or remaining environments which are kept in despite of this amazing destruction which is going on every day.

As you know, about some 50 acres of tropical forest are being degraded or destroyed every minute of the day.

So, these species which are very vulnerable because they are often collected by factious or in miscellaneous ways they are attached to these forests. They are extremely important we feel for the future.

It's impossible, of course, to be in the field at all seasons to see when these species flower and when the possibility occurs of reproducing by collecting pollen in glass and growing them artificially.

Mr. YATES. What's your responsibility for these? Do you just list those that are endangered?

Mr. RIPLEY. We list all orchid species now as endangered. There are about 20,000 species.

Mr. YATES. Do you list all flora?

Mr. RIPLEY. We list all flora in the United States.

Mr. YATES. Also all orchids, no matter where?

Mr. RIPLEY. We are working particularly on orchids, because all orchids are considered as a class, as a group family that would be endangered now, and we happen to have a collection of some 3,000 species, about 300 genera, which is one of the largest, most important collections in the world.

We share this responsibility with the British collection in Kew, outside of London, and the International Union for the Conservation of Nature, which sets up the endangered species books.

So, I just brought these in as example of very exotic looking little plants which don't look at all necessarily, and yet which are, so fragile.

Mr. YATES. It's the most tangible thing we have seen coming out of the Panama installation.

Mr. RIPLEY. Yes. Well, we like to bring some tangible things to you from time to time.

I have information about each species in case you would like—or any member of the Committee would like it.

Mr. YATES. What will happen to them now, will they go to the greenhouse?

Mr. RIPLEY. They will go back to the greenhouse. We have a small group of greenhouses that we rent from the Soldiers' Home here in the City, as I described before, and in these we keep our orchid collection.

We also have some hardy commercial hybrids which we use in our exhibits.

For example in the Arts and Industries Building, we have just taken out a tremendous collection of flowering cymbidiums, all of which we have grown and cultivated and which are very handsome around that central fountain.

CHARACTERISTICS OF THE ORCHIDS

Mr. MURTHA. What is the base that the orchid is on?

Mr. RIPLEY. This is a tree fern, this material. This compacted material is a piece of tree fern bark and it's a very useful substratum on which to plant your orchid.

Orchids are epiphytes, they don't need any nourishment from the plant or the soil in which they rest. They get all their nourishment from the air, from the rain——

Mr. YATES. From the wind and water that comes washing past them?

Mr. RIPLEY. The roots are simply to hold them in place.

This is by all odds the weirdest one, I think that I have seen recently. It looks something like a Venus Fly Trap.

Mr. YATES. This is an orchid?

Mr. RIPLEY. This is an orchid, yes. It's a *Megaclinium clarkei*. It's extremely rare in collections, some people put it into the *Bulbophyllum* group, which is a very common one, wide spread in all parts of the world.

But it is one of the weirdest orchids you have ever seen.

Mr. YATES. Yes, they are. Is that the whole list of things you brought?

RECAP OF EXHIBIT MATERIALS

Mr. RIPLEY. I think that that is——

Mr. YATES. Well, you brought George Washington's drinking cup, you brought the election ticket, a copy of the bibliography of American Art.

Mr. RIPLEY. Yes.

Mr. YATES. Is that under the Archives of American Art?

Mr. RIPLEY. That is here.

Charles, where the bibliography?

Mr. BLITZER. I'm sorry, I don't have it in my hand. It should be here. That's one of which we have only one copy. It is still coming off the press, but it is indeed out of the Archives.

Mr. YATES. Then you have records produced by the Division of Performing Arts. Songs of the Hutchinson Family. Who are the Hutchinson Family?

Mr. RIPLEY. The Hutchinson Family were a celebrated traveling vocal group in the 1870's and 1880's, who, as a whole family, numbered nearly 50 at one time. And they were immensely popular. They were as popular as the concerts of John Philip Sousa.

Mr. YATES. Books published by the Smithsonian Institution Press. That's fine. Models of the Museum Support Center, showing the proposed equipment storage.

Mr. RIPLEY. Yes. We can bring that if you would like to see that. It is a little bit bulky, but we can bring that.

Mr. YATES. Then you have two rhinoceros' horns back there.

Mr. RIPLEY. We have got two rhinoceros' horns, not one, and one of them was cut off one of our own animals when she developed growths so that the two horns began growing together. It's a species that had two horns on the brow. So, that is the smaller one.

The other one is the specimen that was in the specimen collection in the Museum of Natural History.

We have a chart of the Chesapeake Bay Center here showing its watershed monitoring system. I don't know where that is.

Mr. YATES. It's back in the corner.

Mr. RIPLEY. Oh, yes.

FUNDS FOR THE SOUTH QUADRANGLE

And then we have the state chart we showed you and we have the model of the South Quadrangle development.

Mr. YATES. Have you seen the Quadrangle building, the exhibit over there?

Mr. DICKS. I just glanced at it on the way in, Mr. Chairman.

Mr. YATES. Well, it's \$50,000,000. It deserves more than a glance.

Mr. DICKS. Especially this year.

Mr. RIPLEY. Well, it's not \$50,000,000 of the taxpayers' money.

Mr. YATES. That's true. How much of that is taxpayers' money?

Mr. RIPLEY. I'm hoping—and here, again, I don't want to be held to it—

Mr. YATES. You are going to be held to it so be careful.

Mr. RIPLEY. I don't want to be cut to ribbons in another four or five years if I still survive. I am hoping to raise half of that.

Mr. YATES. Where does that put the Treasury of the United States? Suppose they launch on this venture with you and upon your representation that you are hoping to raise half of this.

It's kind of like the time that Congress didn't want to give Teddy Roosevelt the money to send the white fleet around the world and he sent it halfway around the world and they had to bring it back.

Mr. RIPLEY. Yes. I am prepared to pledge that I will come back to Congress every year and tell you exactly what has happened to every penny that has been given to us.

Mr. YATES. There is no promissory note that you can give.

Mr. RIPLEY. Well, that is a promissory note and any time that it doesn't look as if it is going to work, we will backtrack and say we can't do it.

Mr. YATES. How much money would you hope the Federal Government would put up, half?

Mr. RIPLEY. I think that would be entirely fair considering the public service that would occur as a result of this. And that the Congress should be rather pleased if we can put up half on our side and Congress only has to put up half of this project.

We can give you all the figures on this because we have been studying them now for over two years with our own trust fund resources and we have now an American firm of architects working with the Japanese architects and we have hired a facilities study and test borings of the ground.

Mr. Peyton, who is here, is our authority on the underworks, as it were, of this whole structure and what makes it viable in terms of what, I think, you will agree is a very low budget.

Mr. YATES. Well, he thinks this is too low.

Mr. MURTHA. Well, I think it's too low for that 450,000 square feet underground. It seems like an awfully modest budget.

Mr. RIPLEY. Well, we will stand by these figures, I think Mr. Peyton?

Mr. PEYTON. Yes, sir.

Mr. RIPLEY. We will have the supervision of GSA advisors, we will have the City advising us about the utilities that are underground, steam tunnels and things of this sort. We will have engineers. We have already been in consultation with them on the water table.

Mr. MURTHA. Well, we have had such bad experiences with estimates before, but I suppose it's been—Pennsylvania Avenue development, for example—old buildings that have to be renovated. The Visitors' Center, again, is an old building that has to be renovated. So, I assume that's the reason.

That would be the difference. You have studied it more carefully, perhaps.

Mr. RIPLEY. Well, you will remember, Mr. Murtha, that we put up the Air and Space Building and we came in under budget and ahead of time.

Mr. MURTHA. Yes.

Mr. RIPLEY. Which, I think was prudent management. We think we can do it again.

Mr. HUGHES. If I could comment, Mr. Chairman.

We couldn't but be aware of the fiscal problems on the Federal side. I think, however, if one looks at the opportunity here and the timeliness of an opportunity for a shared venture with a substantial amount of non-Federal funds in it, it is indeed a very timely opportunity in part this is because of the nature of the development that's proposed, and also in part because the Secretary has been in business for some time and has a range of associations which will be very useful in this sort of a venture. There are a lot of positive factors on that side.

If we can get as much as half from non-Federal sources it would be a very low budget project, indeed, and would enhance that part of the Mall and the area along Independence Avenue immensely.

There has been some improvement in the area, but as you stroll by the area that is depicted by the model, the contrast, even with a few years ago, is already immense and with this sort of development it will be a major move forward.

Mr. MURTHA. Well, I assume the operation and utilities will be underground also, which will be a substantial savings.

Mr. HUGHES. Yes. Partly because, as the Secretary mentioned, the character of the soil is such that it is relatively free of some of the problems down on Pennsylvania Avenue, for instance.

GOVERNMENT'S SHARE OF SOUTH QUADRANGLE EXPENSES

Mr. YATES. I just wonder how we can get this guarantee that the Federal Government won't pay more than half. The powers listen to the song of Kenneth Gray, remember? It wasn't going to cost a dime and Kennedy wasn't going to cost the public a dime. You don't remember that, do you?

Mr. RIPLEY. I remember Kenneth Gray very well. I remember his helicopter.

Mr. MURTHA. I remember that vividly. I don't think there is anything similar between this and Kenneth Gray.

Mr. RIPLEY. Thank you.

Mr. YATES. If we can make a bargain to go halfway with you, will that be enough?

Mr. RIPLEY. All we're asking for this year is a small amount of planning funds.

Mr. YATES. That doesn't answer my question.

Mr. RIPLEY. I would think—my hope is that we would report to this Congress at frequent intervals how we are coming along and we will be prepared at any time to abandon the plan.

PLEDGES OF FUNDS FROM PRIVATE SOURCES

Mr. YATES. Do you have any other commitments, other than the government of Japan for a million dollars?

Mr. RIPLEY. No, we have got a lot of leads out though.

Mr. YATES. The same leads that went out for the Stuarts?

Mr. RIPLEY. No, they are a totally different set. We don't have any generals shooting from the hip at us either. We have a lot of leads out. We have applications out, we have two committees, one for Asia and one for Africa.

Mr. YATES. Well, shall we base the Government's appropriations on the basis of the way the leads come in?

Mr. RIPLEY. I think that it's very difficult for us to keep these leads out if we're not getting any interest from the Congress beyond the authorization which we have or the appropriations for the planning and the permission from the Office of Management and Budget, the endorsement of the Executive, this is a very good idea.

If we can't keep all the Indian clubs in the air at the same time, then my task, to try to raise the money, becomes almost impossible because the first question major donors will ask is, "Well, is this of any interest to the Congress?"

And I will have to say, "Yes, it's of interest to them in the sense that it has been authorized, but they won't give us any money to help us out with the planning."

AID TO THE MUSEUM OF THE AMERICAN INDIAN

Mr. YATES. Speaking of Indian clubs, what about the Museum of the American Indian?

Mr. RIPLEY. The Museum of the American Indian, which you and Mr. Blitzer and Mr. Kennedy are all very much aware of, is something that we would like to help very much.

It is a very complex subject, I understand, in the statutory sense, in connection with the government of New York State. But we would like to help it because we have, I think, next to them, probably the major collection of Indian objects already. And we have these training programs and are working with native Americans all over the country. We have our festivals, folk festivals and that goes without saying, we have the "Handbook of North American Indians" and we would like to help.

Mr. YATES. Is Mr. Kennedy in charge of clearing it out of the State of New York?

Mr. KENNEDY. No, I know of no intention of that sort.

Mr. YATES. What is the intention?

Mr. KENNEDY. To be of assistance to that Board, Mr. Chairman, as it examines its future in its own order.

Mr. YATES. When will we know what that Board wants to do?

Mr. KENNEDY. We hope reasonably rapidly. We are just trying to help them.

Mr. YATES. Suppose that Board decides that they would like to become affiliated with the Smithsonian, would the Smithsonian be in a position to accept that offer?

Mr. RIPLEY. I think we would have to study it very carefully and presumably contact the Congress and ask them for their determination.

TARIFF COMMISSION BUILDING

Mr. YATES. Tell us about the Tariff Building. What's happening with your negotiations with that building?

Mr. PEYTON. We have been in correspondence with the General Services Administration and Admiral Freeman has advised us that he would like to make the building available to the Smithsonian.

However, the present occupants of the building, the International Trade Commission, have no other place to be relocated at this particular time.

Mr. YATES. Not even with the help of the Pennsylvania Development Corporation?

Mr. PEYTON. I really couldn't speak to that, sir.

Mr. YATES. What will you use the Tariff Commission Building for in the event it is cleared?

Mr. BLITZER. This is one of the most important things that could happen to the Smithsonian in terms of its responsibility and its programs in the history of American art, which I hope we will have a chance to talk about later.

Mr. YATES. That opportunity will come about.

Mr. BLITZER. The Smithsonian already in a sense has become a national center, if not "the" national center for the study of American art.

Most of these activities go on within the old Patent Office Building, where the National Collection of Fine Art, the Portrait Gallery and the Archives of American Art and their various indices and catalogs are located.

They are bursting at the seams, as you will see in here later in our budget request.

Mr. YATES. You want a study room, I think. Something like \$40,000 for a study room, don't you?

Mr. BLITZER. Well, there are various kind of "shoe horn" operations going on, which you will see in here.

The Portrait Gallery is moving some offices into a space that had been a garage and so forth.

They can live that way for a few years, but if the library and the Archives of American Art, the catalogs, the inventory, the scholarly center that already exists could find a home in the Tariff Commission Building, along with some exhibition space, as I say, that really would be the most important development in this field.

COST OF RESTORING THE TARIFF COMMISSION BUILDING

Mr. YATES. Suppose you get the building, how much will it cost you?

Mr. BLITZER. I will refer that back to Mr. Peyton.

Mr. PEYTON. It's not really possible to say right now. However, the General Services Administration has an approved restoration prospectus. It has been approved by the Public Works Committee, both the House and Senate, and through their own repair and restoration process then are starting to restore the building with the understanding that the Smithsonian would eventually receive it.

The priorities are to first take care of the envelope, the exterior of the building, including the roof.

Mr. YATES. Is the building in good shape?

Mr. PEYTON. No, sir, it is not.

Mr. YATES. How much will be required to rehabilitate it?

Mr. PEYTON. In round figures, I would guess probably \$20,000,000, some of which the GSA has already embarked upon.

The building has been allowed to run down and was never intended for modern office use, much less a museum, which would have a much more demanding requirement for heating, ventilating and air conditioning.

Mr. RIPLEY. Parenthetically, Mr. Chairman, the renovation of the old Patent Office Building was about \$6,000,000 in 1964. So I think that's partly due to an inflationary factor.

ASSUMPTION OF RESPONSIBILITIES OF THE TARIFF COMMISSION BUILDING

Mr. YATES. When will you know the answer to your question, Mr. Peyton, as to whether they will find space for the Trade Commission?

Mr. PEYTON. We are thinking in terms of getting custody of the building in about five or six years.

Mr. YATES. After it's put in shape?

Mr. PEYTON. No, sir, five or six years from this point.

Mr. YATES. Why so long? When you say "five or six years," does it take that long to clear this from GSA?

Mr. PEYTON. Well, at the moment they don't have a place to which to relocate the International Trade Commission to.

The rental market here in the Washington area, as I last heard, was fairly tight. So we are talking about constructing a new building for the International Trade Commission, GSA does not presently have an approved project to do that.

Mr. YATES. Thank you.

Mr. RIPLEY. That concludes my opening statement, Mr. Chairman.

EXHIBITIONS AT THE MUSEUM OF HISTORY AND TECHNOLOGY

Mr. YATES. Thank you for an excellent presentation.

I notice that you have Mr. Roger Kennedy here today, who is eager to improve the quality of the Museum's exhibitions.

What does that mean, "improving the quality of the Museum's exhibitions"? I thought you had good exhibitions.

Mr. KENNEDY. Yes, but life is always susceptible to improvement and some of them aren't so beautiful.

Mr. YATES. And those are the ones you want to work on?

Mr. KENNEDY. Yes, sir.

Mr. YATES. Have you been here long enough to make plans for them? What do you contemplate doing and how much is it going to cost the Government?

Mr. KENNEDY. This special exhibit budget that we talked about a little earlier is the beginning of a sequence of years in which 70 percent of the museum space which has really not had much ministering over the last ten years ought to be addressed in an orderly sequence to get it up to speed, get it in a position so the nation's memory is presented in an intelligible and handsome way.

That is going to take some time.

If you would like, we could talk a little more about the first one, or the second one, but the object is to do it in a way which rolls through the place, so that at the end of ten years or so, it's something we can all be proud of.

Mr. RIPLEY. You will recall, Mr. Chairman, that we began in the 1960's planning for the bicentennial celebration of 1976 and it turned out that we were by no means too hasty in that decision, because the phased development of a program of exhibition takes a number of years.

We think that the phased development of bringing the Museum of History and Technology into fruition with Mr. Kennedy's management comports quite well, not only with such a prudent planning exercise, but also with the principles that we developed during the bicentennial exercise. For, indeed, the bicentennial is by no means over and will go on for at least three more years if not four, when one considers the foundation of the Republic in the period from 1775 to 1784.

So, we are in training, as it were, in thinking about these kinds of things, George Washington, and other elements of the beginnings of the Republic with that ambition.

ARTICLE FROM LOS ANGELES TIMES

Mr. YATES. I think we will put into the record at this point, an article that appeared on January 20, in the Los Angeles, California Times, entitled, "The Smithsonian." I think it is a pretty good description of the Smithsonian. Have you seen it?

Mr. RIPLEY. Yes, I have.

Mr. YATES. As matter of fact, you may have written it.

Mr. RIPLEY. No, I think it's got a byline there.

[The information follows:]

[From the Los Angeles Times, Jan. 28, 1980]

SMITHSONIAN: U.S. ATTIC AND MUCH MORE

(By Bill Stall)

WASHINGTON—With his pen, as usual, inked in bedevilment, Mark Twain once described the Smithsonian Institution as a "poor, useless, innocent, mildewed old fossil," the repository for an odd assortment of things including "seeds and uncommon yams and extraordinary cabbages and peculiar bullfrogs."

Today indeed, the Smithsonian frequently is referred to as the nation's attic, the place where we tuck away the clutter of three centuries of Americana, the old curiosity shop of things Americans have refused to throw away because they might be good for something someday.

But the Smithsonian is far more than that. It also is a wonderful combination of the nation's family Bible, photo album, safe deposit box, scientific laboratory and storehouse for all kinds of things, from George Washington's false teeth to an Apollo moon lander.

Not just the attic, the Smithsonian also is the basement and the garage—the workshops where generations of Americans tinkered with things to make them work better.

Even more, the Smithsonian is a sprawling organism that is part-government, part-private, one of those quasipublic creatures that bureaucrats do not like because it does not fit neatly into an organization chart. It came to life almost stillborn, as the what-do-we-do-with-it legacy of a mysterious Englishman in 1846.

Its headquarters is in a gingerbread red sandstone building called "The Castle" on the Washington Mall, midway between the Capitol and the Washington Monument. It is officially ruled by a group grandly known as "The Establishment." At times it has seemed to be an effete Washington organization with a life all its own.

But nothing succeeds like success. And the Smithsonian has become one of the world's leading scientific research organizations, one of the nation's most popular tourist attractions (24 million visitors in the last year compared with 10 million for Disneyland) and a \$188 million-a-year enterprise that, among other things, has spawned perhaps the country's most successful new magazine in decades—appropriately named *Smithsonian*.

The Smithsonian Institution's charter, the enigmatic will of Englishman James Smithson, was so vague that Congress has never been precisely certain what the Smithsonian should be. (Smithson left his fortune to the United States with instructions to establish an institution "for the increase and diffusion of knowledge among men.") And as the Smithsonian grew and came increasingly into the public limelight during the 1960s and 1970s, Congress began challenging the way the institution kept its books and acquired new collections.

Now, the investigations and congressional hearings have faded into the back bookshelves of official Washington and the Smithsonian seems as vigorous as ever, recently winning congressional approval for a \$21 million Museum Support Center and with prospects good for construction of a new art museum building on the Mall.

So what is this old fossil that Twain talked about?

In the Smithsonian's own official words, the institution is "an independent federal establishment devoted to public education, research and national service in the arts, sciences and history."

On the most public level, the Smithsonian is a collective national museum housed in a dozen buildings that seem to contain at least one of everything, from insect larvae to a giant stuffed elephant, from Old Masters art to 1923 grandstand seats from Yankee Stadium, from exhibits of Stone Age life to those of nuclear instruments that could end life.

The various Smithsonian museums and the National Zoo are open to the public, free of charge, every day of the year but Christmas.

By the millions, Americans and foreign travelers come to wander, gawk, marvel and silently ponder the exhibits, and even to shed a tear, as viewers often do while they watch reruns of the first television newscast of John F. Kennedy's assassination.

The other side of the Smithsonian, the part of it out of the public eye, is that of an "open university" where scholars research and study subjects of almost endless variety. There is work on the tiniest microfossils, black holes in space and the nature of mankind itself. The Smithsonian runs a tropical research institute in the Panama Canal Zone, the Chesapeake Bay Center for Environmental Studies, the Center for the Study of Man a radiation biology laboratory, an astrophysical observatory. There is an animal conservation and research center at Front Royal, Va., where zebras graze near cattle and horses as scientists try to figure out how to save endangered species from all over the world.

The institution serves as a clearing house for scientific information and conducts symposiums and seminars. On any given day, Smithsonian scientists may be studying the habitat of aborigines in Borneo, the effects of sun spots on the weather or the musical instruments fashioned by the mountain folk of Kentucky and Tennessee.

A sample of the types of specialists working out of the Museum of Natural History alone includes experts in worms, bone geology, linguistics, algae, sea spiders and catfish.

Over the years, Smithsonian scientists and curators have collected 78 million things to study, probe and prepare for exhibit. Fewer than 5% are on public display but there still is plenty to marvel at.

On a recent day, a Smithsonian official started ticking off some highlights of the six museums and art galleries on the Mall and nearby.

"It just goes on and on" he said. "It's like a huge Christmas tree!"

During a couple of hours of wandering through the Museum of History and Technology, the visitor can see an abbreviated example: the first auto, a 1903 Winton, to drive coast to coast; a 92-foot railroad locomotive; the "Star Spangled Banner," the flag that inspired Francis Scott Key to write the national anthem; the first Washington-Moscow hot-line telephone installed in 1963, and the telegraph key that received the first disastrous details of the Titanic's sinking; Archie and Edith Bunkers' chairs and end tables from "All in the Family"; George Washington's field headquarters tent; a United Farm Workers union flag autographed by Cesar Chavez.

There are Jacqueline Kennedy's and Rosalynn Carter's inaugural gowns, Gen. George Custer's buckskin jacket, and the kitchen from the home of Mt. Shasta gold

miner and farmer George Arbaugh, circa 1857, and even Gen. Phillip Sheridan's stuffed horse, Winchester.

At the entrance to the restroom is a wall display of Bathrooms of America, including a photograph of an "outhouse, northwestern Maryland, early 20th Century."

Over at the popular Air and Space Museum, you can see Orville and Wilbur Wright's airplane, Charles A. Lindbergh's Spirit of St. Louis, a DC-3 and Skylab (a backup version of the space workshop).

At the Museum of Natural History is the world's most famous gem, the Hope diamond, and Martha, the last passenger pigeon.

And it goes on and on and on.

No one is quite sure why James Smithson, a chemist and mineralogist who died in Italy in 1829, arranged to leave his legacy—100,000 gold sovereigns then worth about \$500,000—to the United States to establish an institution in his name. He evidently never visited this country, but his remains were entombed in The Castle in 1904 after the graveyard in which he was buried was displaced to make room for enlargement of a nearby quarry.

It took Congress eight years to agree that the United States even had legal authority to accept the money. When it did, Congress created "The Establishment" under the President, the vice president and the chief justice of the Supreme Court to run the institution, a power that has since been delegated to a board of regents under the vice president and the chief justice.

The board created the post of secretary to be the institution's chief administrator and the characters and interests of the Smithsonian's eight secretaries have molded and shaped the destiny of the Smithsonian. Most have been scientists and the delving of the Smithsonian into new areas of study over the years often has been a reflection of their specialties, coupled with the nature of gifts and bequeaths to the Smithsonian, such as the oriental art collection of Charles Lang Freer that now resides in the Freer Gallery on the Mall.

The current secretary, S. Dillion Ripley, is a biologist, ecologist and authority on Far Eastern birds who has held the post since 1964. The Smithsonian's growth under Ripley has been explosive. Six new museums have opened, including the Air and Space Museum, which rapidly became the most popular with the public. The institution has launched a myriad of programs, such as the annual Festival of American Folklife in Washington, that have popularized the institution beyond the wildest dreams of James Smithson.

There are concerts, lectures and traveling exhibits. And Ripley's brainchild, the Smithsonian Magazine—a sort of cross between the National Geographic and Scientific American—has enjoyed a success that astounded its early critics, and there were many. From its inception in 1970, the magazine has grown to a circulation of 1.7 million and nets more than \$7 million a year, with some assistance from its tax-exempt status.

The institution also does a thriving business with its program for publishing coffee-table books, its museum shops and its mail-order catalogue.

As the Smithsonian's budget soared over the \$100 million mark, all of this could not escape the attention of Congress. There were complaints of mismanagement and lack of accountability and that Ripley had arranged to receive large collections for free although they ultimately cost the taxpayers to maintain and house. Congress was irked, too, that the Smithsonian was reticent about giving a detailed accounting of the private funds it received (Ripley's \$72,000 annual salary, for example, comes from private funds and a raise to \$82,000 has been proposed).

Since a General Accounting Office report in 1977 and hearings in 1978, the Smithsonian has changed some of its bookkeeping procedures and kept Congress better informed about where its money comes from and where it goes. The criticism has quieted and Congress recently authorized the new \$21 million Museum Support Center in suburban Maryland.

Some critics within the museum world contend that the commercialization and popularization of the Smithsonian has come at the expense of its scientific research and that the institution has grown too quickly in too many directions.

But Ripley argues that "a museum must be fun" as well as being a lively, open university where all sort of study and research is encouraged.

There is such a variety of exhibits and work going on, it is difficult at times to conceive of the Smithsonian as a cohesive unit with any sense of direction.

But to Ripley, there is a grand design: to conserve what has been so that we may know what we are and to see where we are going.

AUDIOVISUAL AND SLIDE PROGRAMS

Mr. YATES. You say you have an extensive audiovisual series of slide-cassette and video tape presentations on conservation topics which are loaned to museums and related organizations. How large is that series?

Mr. RIPLEY. Mr. Chairman, I would like to call on Mr. Perrot, who, I think, you know very well——

Mr. YATES. Yes, I know him.

Mr. RIPLEY [continuing]. And who, I think, can answer that.

Mr. PERROT. The question was the nature——

Mr. YATES. No. I read a sentence that appears in Mr. Ripley's opening statement, in which you say you have an extensive audiovisual series of slide-cassette and video tape presentations on conservation topics which are loaned to museums and related organizations.

I wondered how extensive it was. What was it?

Mr. PERROT. We have approximately 80 half-hour television programs on various aspects of conservation practices. These are video tapes which are loaned to museums, historical societies and research organizations of this country and abroad, and in a few cases these are also sold at no profit mainly for the recovery of the duplication of cost.

Mr. YATES. Perhaps I hold the Smithsonian in too high esteem, but I would have thought you would have had an audiovisual series of various kinds that would be in the hundreds.

Mr. PERROT. Well, Mr. Chairman, these programs are entirely devoted to conservation of cultural property.

Mr. YATES. Do you have other audiovisual slides and cassettes other than those on conservation?

Mr. PERROT. We have some on conservation and we have some that are administered by Mr. Julian Euell that deal with various aspects of our Nation's history.

For example, there is a very good one on Indian wars.

Mr. YATES. What I'm trying to find out is what is the sum total of your audiovisual series of slides-cassettes and video tapes? You have 80 on conservation matters.

Mr. RIPLEY. Then I should ask Mr. Euell.

Mr. YATES. All right, Mr. Euell, where are you?

Mr. EUELL. Here I am.

RECORDING FAMOUS MUSICIANS

Mr. YATES. There was a time when you and I talked about having recordings of musicians so that we can have these kinds of studies for posterity. I don't know that we have this.

Mr. EUELL. Well, Mr. Chairman, I think that suggestion came to you through Billy Taylor, as I recall.

Mr. YATES. It could have been.

Mr. EUELL. It's a little more complicated. It becomes more complicated when you are recording artists——

ARCHIVES' ORAL HISTORY PROGRAM

Mr. YATES. I have that impression of you. I also have the impression that the Archives of American Art are doing video tapes on artists today. Is my impression wrong on that?

Mr. BLITZER. They are doing some recordings.

Mr. RIPLEY. Oral history, of sorts.

Mr. YATES. What is the difference between that and the audio-visual slide-cassette or a videotape? How do you record those? Are they in cassettes or are they on video tapes?

Mr. BLITZER. They are simply done on a tape recorder and then transcribed on paper. They are for the use of scholars really.

Mr. RIPLEY. An account by the artist of his evolution, for television.

Mr. BLITZER. You would be able to use a piece of equipment like you have here at the table and then transcribe it.

VIDEO TAPES OF SMITHSONIAN PERFORMANCES

Mr. YATES. Why aren't we doing video tapes?

Mr. EUELL. We are doing it. We do it under certain conditions.

Mr. YATES. What have you done?

Mr. EUELL. We have done videotapes of performances where we have combined the performance which we feel have some historical value. In fact——

Mr. YATES. You mean someone like Horowitz——

Mr. EUELL. We have presented programs dealing with the material that the Hutchinson family used, for example.

We also videotaped certain performances. We have done the same thing with——

Mr. YATES. Well, who have you videotaped?

Mr. EUELL. These are performers, they are not stars or anything like that, but they are people who can sing and can recreate the material of musicians or as performers.

Mr. YATES. If Mr. Kennedy can take a Fonz jacket, shouldn't you take some star and record him?

Mr. EUELL. I am not saying we could not do that, Mr. Chairman.

Mr. YATES. Well, Julian, why don't we do it?

Mr. EUELL. Because if we record a star we have to deal with the recording company that the star is usually signed up with and it's a pretty extensive contract.

Mr. YATES. Okay. I should have known that. You have got problems then.

Mr. EUELL. I don't think we should mess around with that.

Mr. YATES. Well, let me tell you what I have in mind.

With the Park Service, this committee has taken the position that we ought to be paying honor to distinguished men and women in the country.

We have provided a national monument for St. Gaudens, the sculptor, and we are in the process now of doing the same for Georgia O'Keeffe, the artist.

I don't think we are doing enough. I keep thinking of other people who have gone before and who are lost to history and while we have the facilities and the equipment for recording these things for posterity why don't we do it?

LIVING SELF-PORTRAITS

Mr. BLITZER. The National Portrait Gallery, a year or so ago, started a series which they called "Living Self-Portraits." These are evening lectures. I think we met at one of them.

Mr. YATES. Yes, we had Mr. Singer there.

Mr. BLITZER. They picked largely people of fairly advanced age.

Mr. YATES. Yes, we had a recording of Mr. Singer lecturing.

Mr. BLITZER. Those are video taped and—

Mr. YATES. Well, that is what I'm trying to find out. How many of those do you have?

Mr. BLITZER. Well, the ones I can recall, they did Harry Bridges, they did Dr. Meninger, they did—

Mr. YATES. Is there a list of them down there?

Mr. BLITZER. I'm sure I can get you one.

Mr. YATES. I would be interested in finding out.

[The information follows:]

LIVING SELF-PORTRAIT SERIES

Following is a list of the National Portrait Gallery presentations to date in the "Living Self-Portrait Series:"

Harry Bridges, January 16, 1978; Lee Strasberg, February 13, 1978; Robert Moses, March 6, 1978; Karl Menninger, April 10, 1978; Jesse Owens, September 25, 1978; and Isaac B. Singer, October 15, 1979.

SMITHSONIAN AUDIOVISUAL MATERIALS

The Smithsonian Institution produces a wide variety of audiovisual materials for particular purposes and for general, as well as specialized, audiences. The materials are varied in format and quality, ranging from productions of broadcast quality to those for archival and scholarly research purposes. The following lists the audiovisual programs produced by the various Smithsonian bureaus.

OFFICE OF TELECOMMUNICATIONS—PRODUCTIONS AND CO-PRODUCTIONS

FILMS

Mirrors on the Universe: The MMT Story—half-hour, color. A joint production of OTC and the University of Arizona's Radio-TV-Film Bureau, this film documents the building of this 500-ton facility on the 8,500 foot peak of Mt. Hopkins.

Reunions—Memories of an American Experience—half-hour, color. An OTC co-production with the Office of Exhibits Central Film Unit, this film gives added meaning to Smithsonian exposition to recollections of older Americans. General James A. Doolittle and homeopathic medicine producer Gustav Tafel are featured with narration by actor Burgess Meredith.

The Smithsonian Institution With S. Dillon Ripley, Secretary—24 minutes, color. A pictorial overview of the many elements that make up this unique amalgam of museums, collections, and research centers, this 1977 film is a production of OTC.

A Place of Dreams—one-hour, color. A PBS documentary on the history of flight, this was produced by WETA-TV in cooperation with OTC in 1978.

Celebrating a Century—half-hour, color. This film shows the dramatic preparations for the 1876 Centennial Exposition in Philadelphia, and was produced in 1976 by the Office of Exhibits Central Film Unit in cooperation with OTC.

Festival of American Folklife—half-hour, color. A pictorial visit to the annual Folklife Festival on the Mall in Washington, this film was produced in 1975 by the Office of Exhibits Central Film Unit in cooperation with OTC.

On the Site of Life—half-hour, color. A behind-the-scenes look at the National Museum of Natural History, produced in cooperation with American Image Productions in 1975 with narration by Orson Welles.

A Life of Its Own—half-hour, color. A depiction of the development of the Hirshhorn Museum and Sculpture Garden, this film was produced by Eli Productions, Inc. for the Smithsonian in 1974.

Smithsonian Specials—hour-long each, color. Three prime-time programs produced by the Wolper Organization in 1974-75 in cooperation with OTC for the CBS network.

Dilemma of the Modern Urban Museum—half-hour, color. Produced in 1972 by Eli Production for the Smithsonian Institution, this film features discussions between Secretary Ripley and directors of five of the museums.

CBS News Specials—one-hour each, color. Two programs produced in 1970 by CBS News in cooperation with the Smithsonian Institution.

Around the Clock—half-hour, color. A 1968-1970 production for the Smithsonian by Eli Productions, Inc. that touches upon a day's worth of activities at the Institution.

The World is Yours—17 half-hour each, color. A 1966-67 co-production effort with NBC for a weekly series of television programs about the Institution.

The Smithsonian Institution—20 minutes, color. A 1965 production of Ray and Charles Eames, narrated by Walter Cronkite and Alistair Cooke, the film covers the founding and formative years of the Smithsonian Institution.

Festival in Washington—half-hour, color. This film, which looks at the 1968 Smithsonian Folklife Festival on the Mall in Washington was produced for the Smithsonian by Eli Productions, Inc.

Himba Wedding—35 minutes, color. Dr. Gordon B. Gibson documented the solemn ceremonies that surround the marriage ritual of the Himba, a cattle-keeping people of southwestern Africa. Produced in 1969 by the Smithsonian Institution.

A Short Bus Ride—20 minutes, color. The Anacostia Neighborhood Museum and some of its innovative community programs are shown in this production by Eli Productions, Inc. for the Smithsonian.

The Leaf Thieves—half-hour, color. A 1964 Smithsonian production designed to acquaint young people with career opportunities in the fields of natural history.

The James Smithson Bicentennial—20 minutes, color. A 1965 Smithsonian production as the Institution celebrates the 200th anniversary of its founder, James Smithson.

The Music of Shakespeare's England—half-hour, black & white. Music of the 16th and 17th century is heard from the Smithsonian collections in this film produced by the Smithsonian prior to 1964.

The Smithsonian's Whale—15 minutes, color. The planning and construction of the Smithsonian's 92-foot long fiberglass model of a blue whale, the largest exhibit in MNH is shown in this production of the Smithsonian's prior to 1964.

RADIO

Smithsonian Galaxy—is a twice-weekly series of 2½-minute radio features dealing with on-going activities throughout the Smithsonian Institution. Produced by OTC, in its first year of 1979, it was aired on 123 stations in 37 states.

Radio Smithsonian—(half-hour). This OTC production celebrated its tenth anniversary in 1979 and is heard over 70 stations nationwide.

VIDEOTAPE

Urban Open Spaces—15 minutes, color. An OTC production for an exhibition at the Cooper-Hewitt Museum of Decorative Arts and Design.

Aiding Hearing Impaired Visitors—15 minutes, color. Produced by OTC for the Office of Elementary and Secondary Education as an informational and training tool for guards in assisting hearing impaired visitors.

What in the World—three half-hour "pilots." The production is a panel program based upon objects drawn from the Institution's collection and was produced in 1977 as a co-production with WETA-TV.

In Progress—OTC has two special presentations of Division of Performing Arts' performances as prototype programs for the cable television field.

FILMSTRIPS

Museums and Man—color. A series of five sound filmstrips, co-produced by Encyclopaedia Britannica Educational Corporation and the Smithsonian Institution in 1974.

PUBLIC SERVICE ANNOUNCEMENTS

A series of 1 minute-30 second promotion "spots" were produced by OTC for use on television from 1975-1979. (This function is now part of the Office of Public Affairs' activities.)

DIVISION OF PERFORMING ARTS

PRODUCTIONS

Victor Herbert—color video-tape documentation portraying the way Victor Herbert's music reflected the times. (90 minutes of unedited footage.)

Vaudeville I—color video-tape documentation highlighting the role of a band, the use of attention-getting devices, and contributions to the future of the theater. These will be used for scholarly use and research purposes. (90 minutes of unedited footage.)

Vaudeville II—color video-tape documentation focusing on the national development of the vaudeville style and the impact of key managers. These will be used for scholarly use and research purposes. (90 minutes of unedited footage.)

NATIONAL AIR AND SPACE MUSEUM

PRODUCTIONS

The following media will be made available to museums, science centers, and other institutions:

Primordial Soup—Color—Sound 10:14 minutes— $\frac{3}{4}$ " video cassette. Chef Julia Child, in her kitchen, discusses theories for the origin of the life on Earth.

Family in the Sun—Color—Sound—3:05 minutes—16mm. A musical tour of the Solar System for children. The tour visits each planet. Lyrics are set to the tune of a familiar nursery rhyme for youngsters to "sing along."

The Man in the Moon Remembers—Color—Sound—6:04 minutes—16mm. The Man in the Moon recounts the history of the Moon from its origin 4.5 billion years ago to the present using animation and Apollo photography.

You Can Fly—Color—Sound—4:09 minutes—16mm. Actor Lloyd Haynes dispels the myth that flying is just for rugged, super hero test pilots and indeed you CAN fly! The viewer shares a short flight with several simple maneuvers in an open cockpit airplane.

Orbits—Color—Captioned—8 minutes—35mm slides. Describes many types of orbits which are available to satellite mission planners.

NATIONAL ZOOLOGICAL PARK

PRODUCTIONS

1. Videotapes

The Social and Reproductive Development of the Giant Panda—30 minutes, narrated. This videotape documents the encounters between the National Zoo's male and female giant pandas from 1973 to 1978. It was produced by the Office of Zoological Research, Devra Kleiman, Reproductive Zoologist.

Birth of an Indian Rhino—30 minutes. A documentary recording the birth of "Patrick", the first Indian rhinoceros born in the Western Hemisphere. It was produced by the Office of Zoological Research; Dr. Hal Buechner and Judith Block.

2. 16mm Films

The Last Chance—28 minutes, color, 1979. This film explains how the National Zoo transformed a 3000-acre cattle farm in Front Royal, Virginia, into the Conservation and Research Center. The Center's vital work in studying and breeding rare and endangered animals is emphasized. Sponsored by the Friends of the National Zoo.

Zoo: Behind-the-Scenes at the National Zoo—20 minutes, color, 1975. Go behind-the-scenes with the keepers, curators, zoologists, veterinarians, and other staff members to see day-to-day operations. The film focuses on animal care, conservation, and research.

The Big Cats and How They Came To Be—10 minutes, color, 1976. An animated film which traces the evolution of the Panthera, the lion, tiger, leopard, and jaguar, from their beginnings as small forest animals. Produced by the National Zoo's Office of Education in collaboration with the Smithsonian Institution's Motion Picture Unit.

Tiger—10 minutes, color, 1976. A live-action documentary on the endangered Bengal tiger. Produced by the National Zoo's Office of Education in collaboration with the Smithsonian Institution's Motion Picture Unit.

The Giant Panda Film—22 minutes, color, 1976. Starts in China at the Peking Zoo in 1972 and shows the transportation of the giant pandas to the United States, the ceremonial presentation of the animals in Washington, D.C., and shorts from

the first year at the National Zoo. There are some excellent shots of them playing in the snow.

3. 8mm Film loops

The Bird Keeper—2½ minutes, 8mm film loop, color, with titles, 1978. A single concept film loop documenting the duties of the bird keeper in taking care of the animals. Produced by the National Zoo's Office of Education for use in Birdlab.

The Reptile Keeper—2½ minutes, 8mm film loop, color, with titles, 1976. A single concept film loop documenting the duties of the reptile keeper in taking care of the animals. Produced by the National Zoo's Office of Education for use in Zoolab.

4. Slide presentations

The World of Animals—Focuses on the basic needs of animals, food, shelter, reproduction. It includes 20 slides, a script, and bibliography. Intended primarily for classroom use.

The World of Mammals—Focuses on the characteristics of mammals. It includes 20 slides, a script, and bibliography. Intended for classroom use.

Reptiles and Amphibians—Focuses on the characteristics of reptiles and amphibians. It includes 20 slides, a script, and bibliography. Intended primarily for classroom use.

The World of Birds—Focuses on the characteristics of birds and on flight. Intended for classroom use; 20 slides, a script, and bibliography are included.

Vanishing Animals—Concentrates on the causes of extinction and how zoos help endangered species survive. Intended for classroom use; 20 slides, a script, and bibliography are included.

Zoo Jobs—Describes the many different kinds of jobs at the National Zoo. Intended for classroom use; 20 slides, a script, and bibliography are included.

NATIONAL PORTRAIT GALLERY

PRODUCTIONS

The Gallery sponsors a "Living Self-Portrait Series" for which distinguished artists and personages come to the Gallery to speak about their work and their lives. In this way, and by recording these talks, the Gallery furthers the documentation of United States history and the men and women who made this history. Six interviews have been video-taped to date in this series.

ARCHIVES OF AMERICAN ART

PRODUCTIONS

As part of its Oral History Program, the Archives of American Art has produced 1,150 taped interviews and four video-taped interviews of the personal observations of people who are involved in the American art field.

REUNIONS

Mr. BLITZER. The second thing that we have done that Mr. Kennedy and I were talking about is what we know among ourselves as the "Foxy Grandpas"—the foxy grandpersons, or whatever. These are not famous people.

If I might take just a moment to explain part of the origin of this. I was in the History and Technology Museum some years ago, waiting to meet someone, standing by that marvelous combine harvesting machine and we wondered what one particular part of it was.

There was a man standing next to me, in a wool shirt, who told me what it was and had done.

I asked how he knew and he said, "Well, I used to run one of those."

He then walked us around the machine and told us what every part of it did.

The Smithsonian Council, which is a group of scholars that comes once a year now to look at our programs, came up

spontaneously with the same idea, which is that we should find the people who actually operated the machinery in Mr. Kennedy's museum or operated the aircraft in the Air and Space Museum and get them with the objects.

Mr. YATES. A good idea.

Mr. BLITZER. Have the person who drove the locomotive and things like that. A lot of those people will be gone very soon. So, in a lot of different ways we are responding to this.

CONSERVATION PROCEDURES

Mr. YATES. Mr. Perrot points out the document of conservation information for museums and I looked through it and I think it's excellent.

I notice that it tells museums how to take care of the materials. For example, the cleaning of prints and drawings and manuscripts and so forth.

I wish I would have had this earlier with my own prints.

RECORDING GREAT ARTISTS

Mr. RIPLEY. Mr. Euell can add some things regarding audio.

Mr. YATES. I know that Mr. Euell has been recording jazz and I wasn't aware of the songs of the Hutchinson family, but we have the facilities for video tape. I wonder why we don't put them on a video tape or is that too expensive?

Mr. EUELL. We have put some performances on it. The music of Victor Herbert, for example—the performed music of Victor Herbert—we put that on video.

We had the three outstanding pianists, jazz pianists, who performed at the Smithsonian on three pianos and we videotaped that.

Let me just make the point that in presenting American music in all of its forms very often we cannot present the artist who developed that music, he is no longer with us, but we do give the recognition—by playing Duke Ellington's music, for instance, we do give the recognition, and by pulling out and transcribing Louis Armstrong's work—I am in full agreement with you that we have not done enough.

When I say "we" I don't mean the Smithsonian, but I mean in this country to identify and to recognize outstanding artists in the form of monuments and things like that.

I recall getting a question from a French historian one day who asked me, "Where was the statue to Charlie Parker?" and I looked at him and I said, "We have none," and he said, "Well, we have one of your greatest musicians right outside Paris." So, it's not only in my viewpoint, it's not only the lack of recognizing the contributions, the great works of American artists, but then there are sectors of American artists that have been overlooked almost altogether.

So, I am certainly very much in favor of paying attention to that.

Mr. YATES. You have struggled to bring together some of the great artists of the past in the recordings that you do have. Where you have had to use recordings that were made back in 1917 or 1918 or 1929.

Mr. EUELL. 1927 and 1919.

Mr. YATES. I was thinking of the "Zigfeld Follies."

Mr. EUELL. Yes.

Mr. YATES. At any rate, I think it's a good idea, for example, I saw some studies on public television of some of the great people they had on half-hour interviews.

There is one they had with Albert Einstein that I think would be a treasure in days to come. As much as Einstein occupies his place in history and the other great people.

I wondered whether the Smithsonian isn't the logical organization to do this. Perhaps the endowments should be doing it.

Mr. EUELL. I think that the endowments should fund it, but I think an organization or institution like ours should handle it.

Mr. YATES. What I'm saying, is maybe we ought to be funding it through you. Just tell us what you want us to do.

Perhaps you should be coming up with some of these programs and we will be glad to listen to you.

Mr. EUELL. We have been doing it, Mr. Chairman, in all the areas across the board in the Smithsonian and we have done it in the Air and Space Museum, we have done it without Science, but it has been more on our own initiative and it hasn't been formalized.

Mr. YATES. That is why you are so great in the Smithsonian, because you are supposed to have initiatives, right?

Mr. EUELL. Yes, I suppose so.

Mr. YATES. Don't wait for Congress to direct you, for Heaven's sake.

Mr. DICKS. Mr. Chairman, will this help us balance the Federal budget?

Mr. YATES. Well, it will help to spend money in the proper way.

Mr. DICKS. Like the Defense Department, they can take it out of something else, right?

SCIENTIFIC EVENT ALERT NETWORK

Mr. YATES. I notice, in the statement, you talk about the Smithsonian responding with studies to fast developing research opportunities, such as the 1979 earthquake on St. Vincent Island, where Smithsonian researchers were able to assemble data immediately following the quake.

What happens to the U.S. Geological Survey in this? I thought they were in charge of earthquakes?

Mr. RIPLEY. Dr. Challinor, would you like to respond to this?

Mr. CHALLINOR. I'd be happy to respond to that, Mr. Chairman. Fortunately, the Smithsonian operates with the assistance of Federal funds the Scientific Event Alert Network, and this operation allowed us immediately to be notified in Washington of the eruption of the volcano in the Caribbean.

As soon as we got this word we notified NASA who started to have their satellites take photographs of this eruption while it was going on, every time the satellite came over.

Furthermore, there was a NASA airplane flying in the Caribbean at the time checking a big storm. This plane was able to be diverted and photographed an extraordinary phenomena of the volcanic eruption going way up into the stratosphere.

Now, the reason why the Smithsonian was able to do this, was because we have the flexibility to act very quickly and have the information even before the U.S. Geological Survey had it. We called on them——

Mr. YATES. You are talking about earthquakes?

Mr. CHALLINOR. The original one, I am talking about the eruption of the volcano in the Caribbean.

Many volcanic eruptions are associated with earthquakes although not necessarily.

RESPONSIBILITIES OF THE GEOLOGICAL SURVEY

Mr. YATES. I must say that I had the impression that GS was responsible for earthquake knowledge.

Mr. CHALLINOR. The Geological Survey is the lead agency of the Government to conduct research in earthquakes. However, they will have to call on organizations such as the Smithsonian, for some of the basic knowledge that they need for their research.

For example, the Smithsonian now in cooperation with NASA, can actually measure how quickly Africa and South America are pulling apart, and in that case we can use that kind of information. In other words, we measure the movement of the plates of the earth to help the Geological Survey with the kind of information they need for their earthquake studies.

We have in the room the new Director of the Museum of Natural History, who was the scientist who was directly responsible for organizing the mechanism to observe the volcanic eruption in the Caribbean, if you would want more details from him.

Mr. YATES. Well, it isn't a question of details. I'm trying to find out which of the agencies does the work.

Mr. CHALLINOR. The Geological Survey has the responsibility as the lead agency to conduct the research, but the Smithsonian does add on in a very basic way to the kinds of information that the survey would need for their own research.

Mr. YATES. What's the kind of data that you put together?

Mr. CHALLINOR. Well, for example, how quickly are South America and Africa pulling apart. Our Astrophysical Observatory, for example, can measure this in terms of centimeters per year with the use of satellite tracking.

Mr. YATES. Who is this?

Mr. CHALLINOR. The Smithsonian Astrophysical Observatory does this work under contract with the National Air and Space Administration.

Mr. YATES. Is this the Arizona operation?

Mr. CHALLINOR. No, the operation in this case is centered at our Astrophysical Observatory in Cambridge, Massachusetts, which is our headquarters.

We do have the telescope in Arizona, which is the observing aspect of that Observatory.

Mr. YATES. Do you look at what's happening in California, though?

Mr. CHALLINOR. Only indirectly, Mr. Chairman.

Mr. YATES. Well, GS does. They are measuring the quakes and they told us about the bulges in the land and so forth. You don't have anything to do with that?

Mr. CHALLINOR. Not directly. We are interested in how the plates on the earth move, all over the world, not just in California which is a direct concern for the Geological Survey because plate movement there is what might trigger earthquakes in the United States.

Mr. YATES. Well, I would hope that the Smithsonian would worry about that, too.

Mr. CHALLINOR. We are, but we are also looking at this on a global basis.

Mr. DICKS. Mr. Chairman, is the USGS looking at this on a global basis?

Mr. CHALLINOR. I assume they are.

Mr. DICKS. Well, why do we need two agencies doing the same thing?

Mr. YATES. Or are you not doing the same things?

Mr. CHALLINOR. I don't believe, Mr. Chairman, that we are doing the same things.

Mr. DICKS. Do you know?

Mr. CHALLINOR. Yes, I have a relatively clear idea of the U.S. Geological Survey and the kind of work that they are doing.

Mr. DICKS. Why do we need to have two separate efforts?

Mr. CHALLINOR. Well, perhaps I might ask Mr. Fiske who is here, who worked for the U.S. Geological Survey for 15 years and is now at the Smithsonian, and who is a vulcanologist. Perhaps he could answer the question.

Mr. YATES. A vulcanologist?

Mr. CHALLINOR. An expert who studies volcanoes.

Mr. YATES. Yes. Mr. Fiske, we are glad to see you. What do you do for the Smithsonian that you didn't do for GS, or are you better off with the Smithsonian than you were with—

Mr. FISKE. In the world of volcanoes our important contribution is information and communication. And as Dr. Challinor mentioned, the Scientific Event Alert Network is a clearinghouse, a hub here in Washington, of information sent in from correspondents all over the world, who volunteer to send in information and we, in turn, make information available—

Mr. YATES. I thought GS did that, too.

CLARIFICATION OF SMITHSONIAN EFFORTS ON ST. VINCENT ISLAND

Mr. FISKE. Not in volcanoes. In earthquakes—there are two different worlds, the world of the earthquake is much larger, there is a very large amount of Federal funding currently going into earthquake studies. Volcanoes is a smaller operation and this is our world.

Mr. YATES. Well, that is what threw me off, you know. When I read about the Smithsonian responding to fast developing research opportunities, such as the 1979 earthquake on St. Vincent Island.

Mr. FISKE. Well, that must be a typographical error because it refers to the eruption of April, 1979, that took place.

Mr. YATES. I am reading to you what this says, and if Mr. Ripley says it, it must be true.

Mr. RIPLEY. May I ask what page you're reading from.

Mr. YATES. Yes, page 3, the second paragraph.

"With scholarly studies funds, the Smithsonian responded to fast developing research opportunities such as the 1979 earthquake on St. Vincent Island."

Mr. RIPLEY. Well, unfortunately, Mr. Chairman, that was submitted for the record and I didn't read it this morning, I think Dr. Fiske can answer.

Mr. YATES. Is it a volcanic eruption?

Mr. FISKE. The main event was the eruption. There were thousands of small, non-damaging earthquakes, but really the main event was the volcanic eruption.

Mr. YATES. Okay. What you are telling us, is we can leave the earthquakes to GS and the volcanoes to you?

Mr. FISKE. In effect, that's how it works out.

Mr. DICKS. Is this done by Executive Order or what? How do you divide up this responsibility? Do you meet with USGS and say, "Now you take earthquakes and we will take volcanoes"?

Mr. FISKE. Well, they have a large operation in volcano hazard research. Their program works in Hawaii and western United States.

RESEARCH EFFORTS: SMITHSONIAN AND GEOLOGICAL SURVEY

Mr. DICKS. What I'm trying to get at is the duplication there. Is it necessary for the Smithsonian to be involved in something that is being done by USGS?

One of the problems we face, is a feeling amongst, the American people that we have a lot of Government agencies dabbling in a lot of areas and if there isn't any control we are wasting taxpayers' money because something is being done at USGS and being duplicated at the Smithsonian.

Now, how do you address that?

Mr. YATES. If I can complicate the matter even more.

Mr. DICKS. Go right ahead, Mr. Chairman.

Mr. YATES. Tidal waves relates to an earth movement, too, doesn't it?

Mr. DICKS. Why is the Smithsonian in this?

Mr. YATES. Because they're interested in the diffusion of knowledge to man.

Mr. FISKE. We are not in the earthquake part of solid earth science, only in a very, very peripheral way. So, there is virtually no overlap whatsoever.

I honestly do not believe that there is demonstrable overlap in volcano studies because the Geological Survey is emphasizing the study of volcanoes on U.S. soil. We are involved on an ad hoc basis occasionally overseas with personal involvement, such as mine, which incidentally was funded by USAID, not by the Smithsonian.

Because of the disaster down there, there was a large amount of Federal money that went in to help the evacuees and AID has a need to know how bad the situation really is.

Mr. DICKS. Why don't they go back to USGS instead of the Smithsonian? Why can't we have one lead agency here?

Mr. FISKE. Because I have personal and professional involvement in the eastern Caribbean.

Mr. DICKS. I understand that, but is that the way to organize the Government. You may not be here very long.

Mr. YATES. He didn't mean that. He just meant man is mortal.

Mr. DICKS. I don't mean that either, but some people go back to the private sector and don't stay in the Government forever.

SMITHSONIAN COOPERATION WITH U.S. GEOLOGICAL SURVEY

Mr. FISKE. I understand that. We have a very close association with the Geological Survey, the people in Reston. They are our professional colleagues. We are aware of almost every aspect of their programs really.

So there is no duplication at all.

What we did in St. Vincent nobody else in the United States was doing. In fact, nobody was doing it, so it was a material help to the people on that island, the information gathering and circulation we alone do. The Geological Survey does not get involved with that kind of activity.

This is something that the Smithsonian has been doing for years. The diffusion of knowledge of information of data, and, as was mentioned, this resulted in observations being made of that fast breaking event that never would have been made.

It's an unprecedented situation.

Mr. DICKS. What do you do with all this information? Do you create a history?

Mr. FISKE. It's published. There was a symposium in San Francisco in December and the results of that symposium are going to be published.

The sixteen or eighteen scientists who were involved will publish their involvement with this particular activity. Only one of whom was a Smithsonian person, and that person is myself.

There were people from NASA, from scientific labs, as well as a number of groups overseas.

So, it was a catalytic influence that we were able to bring to bear on a fast breaking natural history event.

Mr. YATES. Well, I don't think there is duplication. I think there is a cooperation or coordination here.

Mr. DICKS. Well, it sounds like on this particular project there was coordination.

Mr. YATES. Well, the Smithsonian is interested in every kind of scientific activity really because of the nature of the Smithsonian and it may be duplicative of many of the other activities in the Government.

I don't think the Smithsonian goes into earthquake activities where the GS does. I think we just have kind of a coordinating situation here.

Mr. DICKS. What I would wonder is whether the Smithsonian said to these other agencies, In order for us to do our—to take care of our historical function and responsibility, we need to have input from you about your observations of these natural events and whether you could do it that way, rather than having the Smithsonian, in a sense, doing the same thing that GS is.

PANAMA CANAL TREATY—RELATED COSTS

Mr. YATES. That's what caught my eye and that's why I asked the question. I saw the word "earthquake" there and I immediately thought of GS. Thank you, Mr. Fiske.

May we have Mr. Rubinfoff. Dr. Rubinfoff, you probably didn't see the things that Mr. Ripley was saying about you. He said that as a result of the Panama Canal Treaty, its related agreements, and its implementing legislation, the Smithsonian Tropical Research Institute, which is you, must assume additional programmatic responsibilities, as well as administrative costs, and you are seeking an additional \$472,000 to meet these responsibilities. This is page 6 of the opening statement. The most profound changes result from the fact that Barro Colorado Island has been designated as a Nature Monument and its area extended from 3,900 to over 12,000 acres. Now, how was that done?

Mr. RUBINFOFF. Mr. Chairman, in 1940 President Roosevelt signed a convention, a hemispheric convention for the United States which provided for cooperation among the New World nations in areas of conservation. This sort of fell asleep during the war and was resurrected by the negotiators of the Panama Canal Treaty.

The designation of what is being done scientifically on Barro Colorado Island most closely fit the term "Nature Monument."

So, consequently, Barro Colorado Island is now Barro Colorado Nature Monument.

Mr. YATES. How was that created?

Mr. RUBINFOFF. It was created as a nature monument.

Mr. YATES. How was it created as a nature monument?

Mr. RUBINFOFF. By the Treaty.

Mr. YATES. By the Treaty itself. How did it get expanded from 3,900 to over 12,000 acres?

Mr. RUBINFOFF. There was a feeling that the land on the side of Nature Monument was threatened and there was a desire to protect this area by putting it in the hands of the agency that was responsible for operating Barro Colorado. In addition, they felt that the 3,900 acres——

Mr. YATES. Who was "they"?

Mr. RUBINFOFF. Well, those who were negotiating the Treaty.

Mr. YATES. Mr. Bunker among other people?

Mr. RUBINFOFF. Yes. It needed a bigger area. And the size of Barro Colorado Island limited the kind of organisms that could live there.

For example, it was smaller than the home range of the jaguar and so they wanted to increase the land area available and by doing so both sides of the island they provided stepping stones for organisms that would migrate off South America, and at the same enlarge the area and provided essentially a buffer. This map explains this a little better. The area in red represents the nature monument.

Mr. YATES. Where do you live on the island there?

Mr. RUBINFOFF. No, I live in Panama City, about 30 miles away.

Mr. YATES. And you travel every day?

Mr. RUBINFOFF. No. We have other facilities.

If you flip that over you will see a map of Panama and I live on the Pacific side where most of the headquarters', libraries, laboratories—marine laboratories are, and we also have a small lab on the Atlantic side.

Here is a photo of the island—the area around it is also part of the nature monument.

That total area is about the size of Washington, D.C., which we control with eight game wardens at the moment.

GAME WARDENS AT BARRO COLORADO ISLAND

Mr. YATES. That is my next series of questions about the game wardens. Is that inhabited at all, Barro Colorado Island?

Mr. RUBINOFF. By about 30 scientists from all over the world, who come to work there.

Mr. RIPLEY. It's an international center for ecological and environmental studies, and it has been since its inception.

Mr. YATES. Does it continue to be recognized as such by the Government of Panama?

Mr. RUBINOFF. Yes. In fact, it's the only U.S. operation that did not go out of operation as a result of the Treaty.

We have a contract with Panama, which is for an inter-determinate period. It can go on indefinitely.

In addition to that, should at some point the Smithsonian decide or Panama decide that they are not interested in administering this area, it still has to remain a nature monument. The use of that land cannot be changed without Panama going before the OAS and repealing that Treaty.

Mr. YATES. So, you have got additional program management responsibilities. Now, what will your \$472,000 be spent for?

Mr. RUBINOFF. Part of it is to protect this larger area.

Mr. YATES. Protect it in what way?

Mr. RUBINOFF. Well, we have to employ game wardens. We are not just protecting an island, as we have had to do for the past 30 year or so. It's a different matter protecting an area on the mainland.

Mr. YATES. Protecting it against what?

Mr. RUBINOFF. Against poachers, agricultural encroachment.

AGRICULTURAL ENCROACHMENT IN THE TROPICS

Mr. RIPLEY. Agricultural encroachment goes on all the time.

Mr. YATES. What do you mean by that?

Mr. RUBINOFF. They will come down and cut down the tropical forest and plant corn for a year or two or clear a larger area to grow cattle.

Panama and Costa Rica are areas that can export cattle, which are not a high grade cattle to the United States for fast food companies, and this is a major problem.

Mr. YATES. So you are talking about protecting it from squatters then, aren't you?

Mr. RUBINOFF. Squatters and hunters. Every week an area the size of Delaware is cut down in tropical America, Southeast Asia and Africa.

Mr. YATES. But not on the island of Barro Colorado?

Mr. RUBINOFF. No. We are very fortunate.

PROTECTION OF BARRO COLORADO ISLAND

Mr. YATES. Then why do you need so many people?

Mr. RUBINOFF. We have a much bigger area to protect.

Mr. YATES. How many did you have for 3,900 acres?

Mr. RUBINOFF. About eight.

Mr. YATES. Eight. And you go up to 12,000 and you only need four more?

Mr. RUBINOFF. Well, it's 25 miles of coast line and the perimeter has to be watched.

Mr. YATES. Are you better for this kind of work than the Park Service?

Mr. RUBINOFF. We have been doing it for a long time quite successfully.

Mr. RIPLEY. It's the only major tropical research center in the world that is run by Americans and it goes back to 1926 when the Governor of the Canal Zone designated it the Island and the Smithsonian and three or four other institutions administered it originally; the others dropped out in 1945 and we took sole charge because we had an active program in tropical biology which the U.S. Government agencies do not have.

ACQUISITION PROGRAM AT THE NATIONAL PORTRAIT GALLERY

Mr. YATES. Thank you, Mr. Rubinoff.

Then, Mr. Ripley, talks about, on page 7, a small but significant increase for collection acquisitions at the National Portrait Gallery.

Mr. RIPLEY. I'd like to have Mr. Blitzer speak to this, if I may, Mr. Chairman.

Mr. YATES. How much money do you get now for the Portrait Gallery?

Mr. RIPLEY. The acquisition program, Charles.

Mr. YATES. Well, you actually have more money from acquisitions from your private funds than you do from public funds.

Mr. BLITZER. That's correct. We get a total this fiscal year of \$798,000 for our museums.

Mr. YATES. And you want an increase?

Mr. BLITZER. We are asking for a \$30,000 increase.

Mr. YATES. That isn't very much in terms of acquisition. Why do you bother to ask for such an insignificant increase?

OMB ALLOWANCE FOR ACQUISITION

Mr. BLITZER. Well, that's all the OMB would allow us to ask for.

Mr. YATES. How much did you ask OMB for, \$300,000?

Mr. BLITZER. No.

Mr. YATES. Well, if you didn't you should have.

Mr. BLITZER. We asked for \$50,000 for the African Art Museum and \$50,000 for the Portrait Gallery.

Mr. YATES. And what did they allow?

Mr. BLITZER. \$30,000 for African Art and \$30,000 for the Portrait Gallery.

Mr. YATES. Does OMB know the cost of acquisitions?

Mr. BLITZER. I don't know, Mr. Chairman.

Mr. YATES. Who appears at OMB for your money?

Mr. RIPLEY. Mr. Yellin.

Mr. YELLIN. We have had hearings the past couple of years.

Mr. YATES. I suppose OMB thinks Smithsonian has its own land and it doesn't need anything for acquisitions, especially after the Melzac acquisitions, where you spent a million dollars.

FEDERAL AND TRUST FUNDS USED FOR ACQUISITIONS

Mr. BLITZER. Correct. You're absolutely right, Mr. Chairman, in saying that the Smithsonian provides more funds than Congress does for acquisitions.

Mr. YATES. Well, certainly there ought to be funds provided for acquisitions and I think it's well that if the Congress doesn't do it that you have the money with which to do it.

Mr. BLITZER. I am delighted we can do it.

Mr. YATES. So is Congress.

Mr. BLITZER. If I might give you some comparative figures, though.

Mr. YATES. All right.

Mr. BLITZER. Well, what the—what you do is still not very lavish. These are simply compiled from various annual reports.

Mr. YATES. How accurate are they?

Mr. BLITZER. I think they are accurate. Some of them are somewhat dated.

Just to recapitulate for a minute, Congress this year gives us \$800,000 and under their major acquisition program that was set up by the Regents two and a half years ago, we have a million dollars a year—and if I may say, it's for six Smithsonian museums—so, that's a total from both sources of \$1,800,000 for six—or one might say, for ten museums operated by the Smithsonian.

ACQUISITIONS PROGRAMS AT OTHER INSTITUTIONS

In 1979 the Detroit Institute of Arts spent \$2,000,000 on acquisitions. The Government of Canada, in 1977, voted \$2.6 million for acquisitions by its four national museums. In 1976 the Metropolitan Museum spent \$4.8 million on acquisitions. In 1978 the Museum of Modern Art spent \$891,000. In 1977 the Art Institute of Chicago spent just over a million dollars for acquisitions. In 1978 the Cleveland Museum spent over three and a half million dollars on acquisitions. It's rather interesting, in view of the Stuart Portrait situation, in 1977 the Museum of Fine Arts in Boston spent \$2.3 million and in 1978 \$1.7 million on acquisitions. In 1976 the Government of Great Britain appropriated \$5.7 million for the national museums of the United Kingdom, including \$1.7 million for the National Gallery in London, \$1.1 was for the Tate, \$600,000 for the Victorian Albert, all just for acquisitions.

SMITHSONIAN ACQUISITIONS' PROGRAM

Just again, to give the contrast of the Smithsonian, both from the Congress and from its own sources, it's just under \$2 million for ten museums. It's a very difficult problem for us.

Mr. YATES. Were there any works of arts other than the Stuarts that you wanted to acquire and couldn't for the lack of funds?

Mr. BLITZER. Yes, indeed.

Mr. YATES. Can you tell us what they were and what the costs were? And why we should acquire them.

Mr. BLITZER. There are some that come to mind. There is a collection of a hundred and eleven paintings of American Indians that belonged to Harvard University.

Harvard would like to dispose of them but feels very responsibly that they should be kept together as a group.

They are of considerable research interest as well as artistic interest. We have been offered these; in fact that is putting it rather mildly.

The purchase price is \$2½ million. They will be of great interest to our anthropologists, to the National Collection of Fine Arts and to the Portrait Gallery.

I wrote a note the other day saying that I don't see how we can even talk about it.

Mr. YATES. Who will buy it if you don't?

Mr. BLITZER. It's a very interesting question. I'm afraid what will happen is that Harvard will have to weaken its resolve to keep it together as a group and sell them one by one.

As I say, they have been very responsible. They have decided to try and keep them together. But if there are no buyers, I think they may split them up and just sell them one by one.

GONZALEZ SCULPTURE

There is something that I think you are aware of, Mr. Chairman, the sculpture by Gonzalez, which is now physically in the National Gallery of Art, was offered to the Hirshhorn Museum.

Mr. YATES. Well, it's available to any museums, whoever wants to buy it and pay around \$1 million for it.

Mr. BLITZER. I think more than that. I was told it was five million French francs, which I think is more like a million and a quarter. It's an enormously important work, historically, as you know.

Mr. YATES. Well, interestingly, Carter Brown thinks it would be a marvelous thing for the National Gallery. Maybe we could work it out on a shared time basis like you did the Stuarts.

Mr. BLITZER. I must say moving it a few yards across the Mall every few years would probably be unnecessary. I am not enormously jealous of what other museums in Washington have.

Mr. YATES. What else were you offered that you think you should have bought.

OTHER OFFERS TO THE COLLECTIONS

Mr. RIPLEY. Well, I can give another example of a few years ago. The Redwood Library in Newport, which has a large art collection, had a very important, very significant collection of early Indian leaders, and we simply felt that the Smithsonian was unable to cope with the problem of trying to come up with the necessary funds.

So they were auctioned off and they were disposed of as a result—this was in the late 1960's—for something over a million dollars. This was a tremendous amount of money and quite unobtainable for us. We had no acquisition funds privately of any substantial nature and we had no hope of acquiring a major gift of this sort through congressional action.

Mr. YATES. Is that still true? You were able to acquire the Melzac collection.

COLLECTIONS ACQUISITIONS PROGRAM

Mr. RIPLEY. Through setting up this acquisition funds through our trust funds, yes.

You could block a certain amount of money—

Mr. YATES. How much money do you have in that trust fund for acquisition?

Mr. RIPLEY. How much is it now?

Mr. BLITZER. It's a five-year, \$5 million program and we are now almost exactly half-way through that.

Four museums, the National Collection of Fine Arts, the Portrait Gallery, the Hirshhorn and the Freer were allotted a million dollars each for the entire five-year period.

The History and Technology and Natural History Museums, a half million dollars each for the five-year period.

We are hoping we might be able to find the money to include the Museum of African Art now that it's part of the Smithsonian.

I might say that we made a rule that was not enormously popular with some of our museum directors when the program was set up, that half of the money provided by the Regents would have to be matched by the museums either in money or in gifts.

Mr. YATES. You mean kind of a challenge fund?

Mr. BLITZER. Yes. I am happy to say that that has produced more than a million dollars.

Mr. YATES. There ought to be some kind of a program for acquisitions for the American museums comparable to those establishments. I don't know how to set it up but we ought to think about it.

AFTERNOON SESSION

SMITHSONIAN NATIONAL AWARENESS PROGRAM

Mr. YATES. Mr. Ripley, tell us about the Smithsonian National Awareness Program. You have described this in your justification as one of the two important programs. It is described as a program which will call attention in various exciting and innovative ways to the Nation's energy and environmental issues. How much do you propose to spend on it and what do you propose to do with it?

Mr. RIPLEY. If I may, I would like to ask Dr. Challinor to speak to that.

Mr. YATES. Before Dr. Challinor speaks, I would like to point out the fact that we have one of the Regents of the Smithsonian with us today and we are honored by that.

Dr. Silvio Conte.

Mr. CONTE. Thank you, Mr. Chairman.

Mr. HUGHES. So this is where he practices his medicine.

Mr. YATES. He practices strange things. Go ahead Mr. Challinor.

Mr. CHALLINOR. Mr. Chairman, with respect to the Smithsonian National Awareness Program this is something the Institution has been working on now for about a year. We feel very strongly our institutional responsibility to the citizens—really to the whole world—but especially to the citizens of the United States to help them realize what the situation is in this country with respect to the energy crisis and other crises of the natural orders that we are faced with.

Now, this particular program will be centralized in the Office of the Assistant Secretary, if it is approved, and will consist of two major parts. One is of two exhibits and the second is a major effort in an educational program to diffuse the information that we anticipate pulling together from the program.

"THE SUN AND ENERGY" EXHIBIT

The first exhibit, were this approved by the Congress, would take place in the Air and Space Museum and would be concerned directly with solar energy and how the sun can be used to alleviate some of our energy shortages in this country. This will be done with live exhibits, the sorts of things that citizens might do on their own, and will explain what the costs of such solar energy devices are.

As you are aware, you don't get something for nothing and this applies even when you are trying to harness the sun. It does cost. But as the cost of fuel oil goes up we anticipate that the curves will indeed start to cross and many of the devices already in existence will become increasingly economic.

So this exhibit in the Air and Space Museum would be one of our first efforts to publicize what the Smithsonian feels is its responsibility toward making the general public and its visitors particularly aware of what can be done through the use of the sun in helping meet our energy crises.

"MAN AND PLANET OCEAN" EXHIBIT

The second exhibit which will start in fiscal 1981, but won't be completed until fiscal 1982, would be an exhibit that we are concerned with, Man and His Relationship to the Sea and Oceans. This will take place in the Museum of Natural History and we would estimate the cost of the Natural History Museum exhibit at \$175,000 in fiscal 1981; the Air and Space Museum at \$375,000 in fiscal 1981; and that would complete that exhibit.

For the Natural History Museum, we would come back in fiscal 1982 for the money to finish that exhibit if the initial money were awarded in this particular fiscal year.

The \$50,000 we have set aside in fiscal 1981 would be to develop the educational aspect of this program to increase national awareness.

Mr. YATES. What is it going to cost?

Mr. CHALLINOR. We are asking for \$600,000 as a new program startup in fiscal 1981. This will, as I say, produce one complete exhibit in the Air and Space Museum and more than half an

exhibit in the Natural History Museum in 1981. Plus the \$50,000 educational component in fiscal 1981.

Mr. YATES. If memory serves me right there was a solar energy exhibit, oh, I think it was east of the Air and Space Museum about two years ago. I don't think it was a Smithsonian exhibit though.

Mr. CHALLINOR. No, that was put on by the Department of Energy. The Department came to the Smithsonian for ideas and we worked closely with them but that was funded completely by the Department of Energy, not by the Smithsonian.

Mr. YATES. The Department of Energy wouldn't be inclined to fund this one, would it?

Mr. CHALLINOR. We would go to the Department of Energy for any particular ideas or devices that they might have that they would feel would be useful to exhibit in the Air and Space Museum. We do feel that with that many visitors coming to the Natural History Museum and the Air and Space Museum, and we estimate somewhere around several millions a year, maybe fifteen or twenty million people a year or visits a year would be coming through those museums, and we would have a good chance to get this message across as well as through the educational program which Mr. Ripley talked about this morning as part of our effort to diffuse the information that we gather.

GIFTS TO THE SMITHSONIAN INSTITUTION

Mr. YATES. Has the Smithsonian received any major gifts during the last year of any note like your Dibner Library which you received some years ago?

Mr. RIPLEY. I would like to ask Mr. Hohenlohe to summarize that, Mr. Chairman.

Mr. YATES. All right.

Mr. HOHENLOHE. Mr. Chairman we have received over 3000 gifts of financial support to the Institution this last year.

Mr. YATES. Totalling how much?

Mr. HOHENLOHE. Totalling approximately \$2.5 million.

Mr. YATES. That's pretty good.

Mr. HOHENLOHE. There were major gifts made particularly to the Hirshhorn for its acquisitions program of over \$100,000. The rest of the gifts were less than \$100,000 for a wide variety of purposes throughout the Smithsonian.

Mr. YATES. Are you talking about fiscal 80?

Mr. HOHENLOHE. Fiscal year 1979.

Mr. YATES. 1979.

Mr. HOHENLOHE. Yes.

Mr. YATES. I think that you received a gift of \$5 million recently, a \$5 million arms cache.

Mr. RIPLEY. Recently, yes.

Mr. YATES. From a quiet collector. This is an article in the Baltimore Sun that says:

A quiet collector who squirreled away a \$5 million cache of ancient bronze armor, rare weapons and Napoleonic uniforms has bequeathed to the Smithsonian Institution its most important military collection in 50 years.

The 3,700 pieces range from the Fifth Century B.C. through World War I, including Greek armor, cannon cast for the Revolutionary War, exquisite jeweled swords of seventeenth century Europe and vintage shotguns valued at \$75,000 apiece.

Well, your new Regent would value that. I know he is an expert on shotguns.

The dazzling array of arms is the legacy of C. Bremner Hogg Jackson, who was a sculptor, craftsman and military fancier from Furlong, Pennsylvania. Before his death last summer, Mr. Jackson willed the Smithsonian his entire collection valued at about \$5 million by an independent auditor.

So you got a major gift there, right?

Mr. HOHENLOHE. Right.

Mr. YATES. Does the Department of Defense know you have this? They're looking for ways of building up, you know. Then we have the Chase Manhattan Bank that has given its extensive currency collection to the Smithsonian Institution outright. The collection was presented to the Smithsonian about two years ago.

Mr. RIPLEY. Yes, we had a dinner and a presentation of that.

Mr. YATES. You had a presentation, yes, of coins and all that, wasn't it?

Mr. RIPLEY. Coins and currency, seals, various things associated with early currency going back to Biblical times.

Mr. YATES. That's right. And the gift came from Pharren Zerbe, a renowned numismatist who spent over 40 years assembling the various coins and so on. So whenever gifts are floating about, the Smithsonian is usually in a very favorable place to receive them; isn't it?

Mr. RIPLEY. Not as much as we would like sometimes.

Mr. YATES. Oh, have you lost any?

Mr. RIPLEY. I think we have over the years because perhaps some local city or State concern, feeling that they should go into a particular community rather than come to us, have gotten them. In fact we often turn down proposed gifts particularly, let's say, in the area of portraits by saying that the person involved is of great significance to the State of—and whichever State it is—but possibly not of national significance and we attempt to advise them how to designate it.

STUART PORTRAITS

Mr. YATES. Tell us about your Stuarts now. You have a shared time agreement, haven't you, with the Boston Museum?

Mr. RIPLEY. The Boston Museum of Fine Arts has wound up owning them jointly with ourselves. We put up \$2.75 million which is a net financial gain to ourselves because we had originally pledged to put up \$5 million. The Boston Museum of Fine Arts comes in for \$2.10 million and the Athenaeum agrees to lower its price by some \$100,000 to \$200,000, and I forget the exact figure.

In any case, we share them 50/50 in time. We each have three years of time, and the Smithsonian has agreed to be the arbiter on questions of cleaning, conservation and matters of technical detail about their management.

We felt that this was an important point for us so we retain the right to advise as between the two of us on the maintenance of the paintings.

Mr. YATES. Where will you show them?

Mr. RIPLEY. We plan to show them in the Palace of Dr. Marvin Sadik.

Mr. YATES. Are there any other paintings you have in the National Portrait Gallery that have that value?

Mr. RIPLEY. There is perhaps one other painting of an undetermined estimated value. This value of the Stuarts, of course came from commercial sources.

Mr. YATES. Obviously established by the marketplace.

Mr. RIPLEY. Right. It was a guesstimate in effect. It was a sliding thing, \$4 million to \$6 million and something in the summer of 1978, to be exact. But there is one other painting, the Landsdowne portrait of George Washington, the full-size rather heroic size painting which is one of the few known paintings that Gilbert Stuart actually touched with his brush. They were done in his studio. This was done to the order of a British Whig peer at the time of the end of the Revolution who admired Washington so much as a hero that he commissioned Stuart to paint the painting.

It currently belongs, and is in the entailed estate of Lord Roseberry. It belongs to his heir who will be 21 in about five years or so and then it may well be that the family at that point would decide to give it for auction. It is a national treasure of Britain. Or they might decide to deed it to us in some form. We don't know. It is completely undetermined at this time. So it really depends on the decision of the family at that point.

The mother of this young heir is coming to Washington in the early summer, and we plan to show this to her at this site and say that we would like to keep it. It's been on loan since before the Bicentennial.

Mr. YATES. Are all of your dealings on the Stuarts worked out? There are no conflicts?

Mr. RIPLEY. No, sir, I don't believe they are entirely worked out, because this agreement which has been publicized and we have both agreed to, must now be certified by the Attorney General of the Commonwealth of Massachusetts.

Mr. HUGHES. Then the probate court blesses the arrangement presumably.

I would like to say one more thing about the Stuart portraits. I didn't want to imply that we were not optimistic about the evolution of events in Boston. It is our understanding that there have been rather extensive discussions throughout the negotiations between the Athenaeum, the Museum, the Attorney General and others, so we are most hopeful. I think it will take some time, though, perhaps a month or two to run.

SALARIES AND EXPENSES REQUEST

Mr. YATES. Let's talk for a minute about the—this is page IV of your justifications. That shows a breakdown of where the amount of money is you want and the salaries and expenses. Your big accounts are science—Mr. Challinor is blessed with most of the money; isn't he?

Mr. RIPLEY. Yes, sir.

Mr. YATES. By far. That shows in whom you have confidence, right?

All right then you put poor Mr. Blitzer—only \$19 million for Mr. Blitzer. We are still emphasizing science and mathematics in this country, and humanities are still pulling up second.

Mr. RIPLEY. No, I am pulling for all the humanities.

Mr. YATES. Public service is \$2.5 million; \$9 million for museum program—\$9 for Mr. Blitzer.

Mr. BLITZER. No.

Mr. PERROT. I plead guilty to that.

Mr. YATES. Why do you get that money? I thought Mr. Blitzer was in charge of the museums?

Mr. RIPLEY. He is in charge of our bureaus that have history and art museums. Mr. Perrot is our Mr. Museum for the world.

Mr. YATES. All right. So his name is really Paul M. Perrot.

Mr. RIPLEY. Yes, Paul "Museum" Perrot.

Mr. YATES. Then you have special programs for \$6.6 million and administration for \$8.5 and facilities services for \$32 million totaling \$120 million for salaries and administration.

SPECIAL FOREIGN CURRENCY PROGRAM

Now, foreign currencies, you want \$4,450,000 of so-called excess local currencies. What is happening to your Egyptian programs? Are they through?

Mr. RIPLEY. We are through at present. I am not sure, Dr. Challinor, whether we are getting some special grants, or what is the status there?

Mr. CHALLINOR. We have not been able yet to get any addition to the existing amount of Egyptian pounds that are available. We have, however, reserved Egyptian pounds in sufficient quantity to let us finish in an orderly fashion those projects that we are supporting.

Mr. YATES. Page B-7 shows that you want \$50,000 of the \$4.5 million for allocation for Burma; \$375,000 for Egypt; \$10,000 for Guinea. What's in Guinea? And you want \$3.72 million for India and \$435,000 for Pakistan.

Now, in how many of the five nations which I have just listed do we have foreign funds?

Mr. CHALLINOR. Mr. Chairman, we have them in all five.

Mr. YATES. In Egypt they are using them to build an embassy, aren't they?

Mr. CHALLINOR. Among other things, yes, they are using them to build an embassy but these are the five countries left that still have U.S.-owned local currencies in excess of the regular needs of the United States.

Mr. YATES. Won't they have to use the money in Pakistan to rebuild the embassy?

Mr. CHALLINOR. They will indeed use U.S.-owned Pakistani rupees to build the embassy but there still should be enough left even after using those funds to build an embassy, to fund the \$435,000 worth of Pakistani rupees that we are seeking.

Mr. YATES. I don't find any reference in your justification to Burma or Guinea or Pakistan; do I? This is page B-5. Is there an explanation somewhere else? Why do you want the money for Burma? What do you propose to do in Burma?

Mr. CHALLINOR. We have one project that we have just gotten approval for to send a research scientist to Burma. One of our major problems there is getting permission from the Burmese government to send an American scientist into the country.

Mr. YATES. To do what?

Mr. CHALLINOR. In this case, I would have to doublecheck what that scientist was scheduled to do. As I recall it had to do with a project on Burmese art. I can find it here.

Mr. YATES. Burmese art?

Mr. CHALLINOR. Yes, sir.

Mr. YATES. Why are you into Burmese art?

Mr. CHALLINOR. Well, the Smithsonian foreign currency program is—

Mr. YATES. I thought this was Mr. Blitzer's area.

Mr. CHALLINOR. The Smithsonian covers grants on art, archeological digs, hard sciences, natural history sciences, and—

Mr. YATES. And you are in charge of the program?

Mr. CHALLINOR. I am in charge of the program.

Mr. YATES. Whether it be art or science or humanities or letters or whatever?

Mr. CHALLINOR. Yes, Mr. Chairman.

Mr. YATES. So it may cover Burmese art. Egypt, you are still engaged in your medieval Islamic writings of the Mamluk period?

Mr. CHALLINOR. That is among some of the things we are doing. We are also doing work in astrophysics or astronomy with the University there and on various joint projects in the natural history sciences as well.

Mr. YATES. Are you doing any digging there?

Mr. CHALLINOR. There is one—

Mr. YATES. Archeological diggings?

Mr. CHALLINOR. There is one small dig on the outskirts of Cairo that we have supported through the American Research Center in Egypt for the last decade. What we are particularly concerned about is, as the Egyptian pound goes off the excess list, how the American Research Center in Egypt will survive. This is a consortium of around 25 American institutions including the Chicago Art Institute that have banded together on this.

Mr. YATES. You say Chicago Art Institute or the Oriental Museum?

Mr. CHALLINOR. Yes, the Oriental Museum. I was wrong, excuse me. The Smithsonian has supported the American Research Center in Egypt all these years.

Mr. YATES. Let's turn to Guinea. What are you going to do in Guinea?

Mr. CHALLINOR. Guinea is a little hard to tell because we have had again problems on getting Americans in there. What we would like to do in Guinea is to reserve this fund to allow some of our zoologists and botanists to go in there to study animals and plants in Guinea and West Africa as long as these funds are still available.

We have had a difficult time getting permission from the local government to send them in.

Mr. YATES. Let's turn to your museum programs for a second. This is page 32 of your museum programs and related resources

special foreign currency programs which is a supplement to the budget submission.

For Egypt you have survey of Islamic art of the Mamluk period, \$13,937. Then you have a Capitol Children's Museum in Washington, D.C., to travel to Cairo and Luxor to assess the possibilities for establishing a children's museum—where? In Cairo and Luxor?

Mr. CHALLINOR. In Egypt, yes, Mr. Chairman.

Mr. YATES. That's a great trip for that investigator, isn't it? Do your Regents know about this?

Mr. CHALLINOR. It hasn't been hidden from them. I hope they do.

Mr. YATES. Guinea, according to this, somebody is going there. Mr. Bassing is going there to survey the national museum system and program of professional museum systems. Do they have a national museum system in Guinea?

Mr. CHALLINOR. Mr. Perrot may be able to answer that for you, Mr. Chairman.

Mr. YATES. Paul, do they have a national museum system in Guinea?

Mr. PERROT. Mr. Chairman, I will just make a comment on Guinea. I know that one member of the Smithsonian has made a survey of the situation in Guinea some time ago to find out what the museums' needs are.

Mr. YATES. Why do you want to find out about Guinea museums?

Mr. PERROT. This was in terms of technical assistance, Mr. Chairman. This is really not what I was——

Mr. YATES. Why don't you leave it to AID then?

Mr. PERROT. This is concerned with technical assistance museum development, Mr. Chairman, and we have expertise in this and we assist nations and organizations around the world in this field.

Mr. YATES. These things happened in 1979 apparently.

Mr. PERROT. If you would allow me just to comment on the trip to Egypt?

Mr. YATES. Sure.

Mr. PERROT. Mrs. Ann Lewin, Director of the Capitol Children's Museum, has developed very close relationships with Mrs. Sadat and Mrs. Begin as a result of visits by both of these two ladies to the Capitol Childrens Museum some months ago. She was invited to go to Egypt and provide guidance for the possible establishment of children's programs in Luxor as well as in the development of a museum in Cairo. This was aid, as it were, of a professional nature with which my office was not involved in, but I remember the occurrence and therefore I am providing this information for your clarification.

In all probability, in time, there will be a children's museum developed in Cairo.

Mr. YATES. In Cairo.

Mr. PERROT. Yes.

"PUPPETEERS OF AMERICA"

Mr. YATES. Puppeteers. You have the Puppeteers of America, from Los Angeles who want to go on this. I wonder why AID shouldn't do this rather than the Smithsonian? But I suppose the Smithsonian cuts across all the other agencies because of your, or because of Mr. Smithson's original charge.

Mr. RIPLEY. This has something to do with our folk program. I don't know whether Julian or Charles would know about it.

Mr. YATES. You try to promote international understanding among the diverse cultures of Africa and Asia as it says here.

Mr. EUELL. I know something about it.

Mr. PERROT. Mr. Chairman, there will be an international meeting of puppeteers taking place in Washington later this year and the Smithsonian is participating with a number of other agencies in developing programs which would include inviting traditional puppeteers from various parts of the world to come to Washington and participate in the festival as well as perform. Activities will take place at the Kennedy Center and I believe the Museum of History and Technology, and other institutions, will be offering public programs in keeping with our tradition.

Mr. RIPLEY. We have our own puppeteers, you know, Mr. Chairman, and we have had them for years, and they have been a very successful aspect of our outreach program here in the city.

Mr. EUELL. If I may add to that, Mr. Chairman.

This is an international event, and most of the performances will be closed to the public. Our part of it is to try to present some performances that will be open to the public. This will be the only opportunity for the general public to see some of these very famous international puppet groups from around the world.

Mr. YATES. Why are they going to be closed to the public?

Mr. EUELL. It is a conference, and it is going to be held in a conference setting and there will be just people interested in puppeteering and that kind of thing which is not our part of it.

Mr. RIPLEY. The technical aspects in a conference.

Mr. YATES. You mean the press won't be allowed into the thing?

Mr. EUELL. I would suspect they might be but it is not for the general public.

Mr. RIPLEY. Not with performances and all.

Mr. EUELL. We would be giving performances in some of our facilities that would be open to the public and that is being handled by the Folklife Festival division here at the Smithsonian.

Mr. YATES. Now we have construction. The first part of this anyway.

INDIAN AMERICAN INSTITUTE OF AMERICAN STUDIES

Mr. RIPLEY. Mr. Chairman, may I ask if Mr. Blitzer could say a word in regard to foreign currency about the American Institute of Indian Studies?

Mr. BLITZER. Only to emphasize what is stated on pages B-5 and B-6 of our budget.

Mr. YATES. All right, go ahead.

Mr. BLITZER. The Congress last year supported to the extent of \$500,000 our request for forward funding for the American Institute of Indian Studies and now before you is a request for an additional \$750,000.

Mr. YATES. Is that the result of inflation or expansion of the program?

Mr. BLITZER. Neither. Last year our request was for \$4 million and all that emerged was half-a-million.

The OMB has been supportive of this and we might be able to come to you next year with a larger request.

The point of this is to prevent happening in India to the American Institute of Indian Studies what has happened in Egypt to the American Research Center.

It seemed at some point that there was simply an inexhaustible supply of United States-owned rupees in India but the prediction is now they can disappear as rapidly as five or seven years.

Mr. YATES. Perhaps we can get the Moynihan gift back then?

Mr. BLITZER. I suspect he didn't realize how quickly the remainder would go when he wrote the largest check in the history of the world. If this money could be put aside, the system is being worked out under which the money will not be available to the AIIS until rupees are no longer on the excess list. But if this could be a fairly substantial amount of money it would be carried forward several years after that time.

I would only emphasize that this is an instance in which the Smithsonian is not asking for money for the Smithsonian to do anything. The AIIS as you know is a consortium of 32 American universities with its headquarters in Chicago.

This institute is an enormously highly regarded entity by the American academic community and the Government of India. It is in a position in India to do what no other organization can do.

Mr. YATES. That's a provocative and challenging and fascinating statement. What is this organization able to do in India that no other organization can do—including the State Department?

Mr. BLITZER. That is the easiest part. As you know, expenditures of these excess foreign currencies can only take place with the agreement of the government.

Mr. YATES. With both governments.

Mr. BLITZER. There have been ups and downs in our relations with the Government of India but through the ups and downs the AIIS has gone on an even course.

Mr. YATES. What have they been able to do?

Mr. BLITZER. They have been able to send Fellows to India to do research in almost every field from the arts to the sciences when other U.S. organizations simply could not get visas for their people.

They have set up a center in Benares for the study of Indian art and architecture which now is as highly regarded by the Government of India and the people of India as any Indian organization. So they can get cooperation, they can get access to archeological sites, they can get people into the country, they literally can do what in my experience no other American—perhaps no other foreign—organization can do in that country.

Mr. YATES. I'll take your word for it. Reading the papers I get the impression that our relationship with India isn't all it should be.

Mr. BLITZER. I am afraid that is true and I think that it is all the more important that this organization is protected, because this particular organization is one of the few remaining threads that has not snapped when things cooled.

Mr. RIPLEY. It is a sort of a neutral island in the middle of a tangled sea.

Mr. YATES. Does the State Department know of this?

Mr. RIPLEY. They know of this but I don't know what they have to do with it.

SOUTH QUADRANGLE OPERATING COSTS

Mr. YATES. Well, I hope there is no failure of communication. Let's go back for a second to the Quad building. Do we know now what the operating costs are likely to be for your new building or haven't you worked that out yet?

Mr. RIPLEY. Mr. Peyton has a general figure, I think.

Mr. YATES. Would you put that in the record?

Mr. RIPLEY. Yes, I will.

[The information follows:]

ESTIMATED OPERATING COSTS—SOUTH QUADRANGLE

Building operations for the Quadrangle are expected to cost approximately \$3.4 million (fiscal year 1980 dollars) for services, maintenance, repairs, protection and utilities to support twenty-four-hour, seven-day-a-week activities. Additional resources in the amount of approximately \$2.1 million (fiscal year 1980 dollars) will be required to support increased program activity for the Freer Gallery of Art, Museum of African Art, and Rare Book Library.

SOUTH QUADRANGLE DEVELOPMENT FUNDING

Mr. CONTE. Mr. Chairman, could I ask that you yield on the Quad building?

Mr. YATES. Of course, I will yield to the distinguished Regent.

Mr. CONTE. Did Mr. Ripley discuss how far along the plans are?

Mr. YATES. On the Quad building?

Mr. CONTE. Yes.

Mr. YATES. Yes. He has given us assurances that he is going to raise half the money to build the building.

Mr. CONTE. Has he given you any figures of what they have raised already?

Mr. YATES. Yes, a million dollars from the Japanese Government so far.

Mr. CONTE. That's a pretty good record.

Mr. YATES. Well, not quite. It ought to be more than that. I have great respect for Mr. Ripley and his fund raising proclivities, but you know, he hasn't given the Committee a promissory note in writing for \$25 million of what the Smithsonian would raise. But I don't want to press him.

Mr. RIPLEY. Well, we do want——

Mr. YATES. Discretion is the better part of valor. I better quit.

Mr. RIPLEY. We have listed in our five year prospectus how we think we will raise that and that is available to the Congress as approved by the Regents.

Mr. YATES. I thought you didn't want me to put that in the record.

Mr. RIPLEY. No, I just wanted you to be aware of it.

Mr. YATES. I am aware of it. But when you mentioned the Congress to be aware of it, I wondered if you wanted me to put it in the record now?

Mr. RIPLEY. Well, I am sure——

Mr. YATES. It's up to you.

Mr. RIPLEY. If you would care to, we would be very happy to have you do that.

Mr. YATES. I think that you're coming on a very tough time. He sits in the deliberations taking place now on the issue of trying to

find a budget that will be balanced and I suspect that the appropriations that are going to be hit the most are going to be the construction appropriations and the land acquisition appropriations. We'll defer those for a year or two or so. And I would think that your Quad building appropriation might be one of these, except you are putting the money up at least currently for the planning.

Mr. RIPLEY. Yes.

Mr. YATES. Although I respect the testimony you have given, that your task of raising the funds will be immeasurably eased if you could go to your prospective donors with some assurance that Congress was supporting you in this respect.

Mr. RIPLEY. This year we are only asking for planning funds.

Mr. YATES. That's right. So I think that if—

Mr. RIPLEY. We know those aren't real construction funds.

Mr. YATES. I think that is a good argument. I must say I am not quite as adamant in my opposition to the construction as I was last year. I think the committee is interested primarily in getting your Museum Support Center built first because that gives you flexibility in the operation of the Smithsonian that you don't have now, and to get your collections in shape really. You have your inventories and a place to put these things and I think that is a very vital building. I somehow suspect that you might have to struggle along with this, you may have to for a year or two.

Mr. RIPLEY. We can't possibly build anything in this area for a couple years anyway, no.

Mr. YATES. That's right.

Mr. RIPLEY. Until we get our other things more in order, yes.

Mr. YATES. So we are sympathetic, Silvio, it's just a question of the—

Mr. CONTE. I think you are more than fair.

Mr. YATES. Well, that is nice of you to say.

Mr. CONTE. And a couple hundred thousand for planning would do that, hold us over.

Mr. YATES. He did that to show that the Smithsonian is determined to go ahead with what they consider to be a vital and essential project to the well-being of the Smithsonian which is their right. We didn't provide the initial money last year and he went with the consent of the Regents. So I assume one of these days the committee will be very sympathetic about the proposal. I hope we can work into it something relating to the Museum of the American Indian somewhere along the line. But that is a possibility for the Tariff Building or for Mr. Kennedy's museum.

Maybe we can work that out. At any rate, are there any other points you want to raise now while you are here? I am very serious. I know you are a Regent and you are also ranking member of the Committee.

BASIC RESEARCH AT THE SMITHSONIAN

Mr. CONTE. One other area we brought up in the Board of Regents at our last meeting—

Mr. YATES. May I say the Committee is delighted to have a Regent here? We really are.

Mr. CONTE. I wish you were a Regent with me, because I know you have made great contributions to——

Mr. YATES. But I made my contribution, and after I made it, I left.

Mr. CONTE. I mean that sincerely.

Mr. YATES. Of course you do. And I may say in reply that there is no more distinguished or better group that one would want to be a member of than the Board of Regents of the Smithsonian. I think if one institution could be outstanding in this city, I think that the Smithsonian is it. That kind of eases the cuts we are going to make in the budget.

Mr. CONTE. I notice by Mr. Ripley's statement that I read this morning that fiscal year 1981 justification which includes collections management and exhibitions and education, basic research and so on, that there is no money in here for basic research or research awards.

Mr. YATES. Well, we had some difficulty with that for a couple of years and we thought we had worked it out. At any rate, was there anything that hurt your operations last year because funds were not available?

Mr. RIPLEY. Mr. Challinor can speak to that very well.

Mr. YATES. After seeing the amount of money you are giving him, I don't know that he can speak to it very well.

Mr. RIPLEY. Well, this is money for basic research grants with the Institution and it is the scarcest money we have.

RESEARCH AWARDS PROGRAM

Mr. CHALLINOR. You recall, Mr. Chairman, that back in 1964 we got \$350,000 from the Congress, and up until 1978——

Mr. YATES. I must say I didn't recall that very quickly.

Mr. CHALLINOR. Up until 1978 we were funded by the Congress for a research awards program. Last year, we went ahead and received proposals from Smithsonian scientists. There were some 35 proposals that had passed review by an outside panel of experts to judge them as eligible for support, but when the Congress did not give us research awards money last year, all those 35 proposals have now been in abeyance. We are still trying to look for funds to replace them, but as you are aware, as an internal policy matter, the National Science Foundation still does not allow individual Smithsonian scientists to apply.

Mr. YATES. Why does it not? What is the policy?

Mr. CHALLINOR. Their policy seems to be, as I understand it, that were they to allow access to the National Science Foundation by Smithsonian scientists who happen to be employees, they would thereby have to open their funds to proposals from all Federally-employed scientists at the USGS, or NIH, or wherever they might happen to be.

Therefore, they are nervous about allowing Smithsonian scientists access to NSF grants, even though where programs are concerned we have enjoyed good relations with them.

Mr. YATES. How much is involved with the 35 scientists?

Mr. CHALLINOR. Normally, to fund those projects we are talking about between \$400,000 and \$450,000 is what we had received from the Congress for that program until 1978.

Mr. RIPLEY. These were funds that Congress indicated 1964 they would make as a replacement, because of Congressman Albert Thomas' statement the year before when we went before his committee, the Science Committee, that he felt it was inappropriate.

It is a very sad state of affairs for us, because much of the kind of science that we support is science which is directly in the interests of the National Science Foundation to fund.

It is the kind of program in the natural sciences, in biology and ecology and environmental sciences, particularly, that they like to fund, and they would fund if it came from the University of California, or the university of this or that.

Mr. YATES. Why should Congress fund a scientific program of that kind and not fund a humanities program? You have your humanities scholars as well. Why do you limit your Smithsonian awards only to scientists?

Mr. RIPLEY. We have an internal program in which we do not limit the funds to people who are in science versus in history or the arts, and we don't feel the same pressure for funds as much in the humanities side for this reason, that the scientists who apply for funds to the NSF normally are thinking in terms of the furnishings of a space where they are going to do experiments, whether it is with microscopes or a lot of hard materials, and the humanities type grants tend to be a pad and a pencil, sitting at a desk. So, aside from travel, which is a necessary component to get to some place to look at things or find them, there is really not an exact comparison in the amounts of the grants that are being sought for. Do you want to add to that?

NATIONAL SCIENCE FOUNDATION REPLACEMENT FUNDS

Mr. BLITZER. Yes, it might come better from me. The fund that he has been referring to, once called NSF replacement funds, are available to humanists. They have applied, and they indicate the amounts of money they need.

Mr. YATES. Why don't you take the money out of—well, our last year's report says that the committee recommended that the research award program be supported in the same manner as other programs of the Smithsonian. The Senate report said that in agreement with the House, the committee is recommending a decrease of \$457,000, and so forth.

Mr. RIPLEY. We feel it is essentially unfair, because we employ these people in competition with universities or equivalent institutions across the country. If I wished to recruit a person to be a curator in some aspect, whatever it might be, science or humanities, that person will scrutinize the job with great care.

Mr. YATES. Certainly.

Mr. RIPLEY. He is a human being and a career man.

Mr. YATES. If I might interrupt you for a moment. The committee suggested, "Yes, this is an important program, but why don't you pay for it out of your own pocket?"

Mr. RIPLEY. Every other government-employed researcher in other branches or bureaus of the government where they receive appropriated funds, as in our particular case we receive appropriated funds, has access to funds of various sorts from Federal appropriations.

Mr. YATES. But they don't have access to the private funds that you have.

Mr. RIPLEY. Some of them do in certain cases.

Mr. YATES. Give us an example.

Mr. RIPLEY. In NIH, I think they have a various amalgam of other funds.

Mr. BURGNER. Like the National Institute for Cancer, you have a cancer research fund, and the Heart Association.

Mr. RIPLEY. They are anomalous, but there are other places in the government, the Park Service has its foundation, and so forth, where there are these small amalgams of private funds.

Now, on the strength of it, it seems difficult to us to equate our scientists, who are Federal employees, Civil Service employees in most of our museums, with a career in which they are somehow deprived of having any access to research funds provided through government sources.

Don't you think that is true?

Mr. CHALLINOR. Yes. I might elaborate. Programs in oceanography, or astronomy, take an enormous amount of money, and none of the Smithsonian funds or private research funds could come close to affording research vessels, or even time on research vessels. This is why the NSF, which has research vessels of its own, could be helpful, to Smithsonian, marine scientists applying for support.

THE THOMAS RULE

Mr. YATES. Maybe we ought to talk to Mr. Boland, Mr. Thomas' successor, to see whether or not he would rescind the Thomas rule.

Mr. CONTE. Mr. Chairman, they are going to have hearings on that tomorrow.

Mr. YATES. Are you going to attend?

Mr. CONTE. Yes.

Mr. YATES. Why don't you attend that and ask that the rule be rescinded? The action taken by the committee was predicated on the committee's reluctance to fund programs of the Smithsonian where the program grants were made by the Smithsonian itself.

With the National Science Foundation, you have an outside organization, and they are competing with everybody else on the outside for that. There was a question in our minds as to whether or not there was too much of a buddy-buddy system. Perhaps we were wrong. Perhaps this was totally objective in its application, but that was the consensus of the committee at the time.

I think it would be much better if they were to apply to the NSF for this. So you might be able to render a service, a very significant service.

Mr. RIPLEY. Reviving that history, Mr. Chairman, as you point out so cogently, when it was agreed that Mr. Thomas' strictures—it was in the language of the report that year; it is not legislative—but when that stricture appeared and when it was agreed we could

ask for replacement funds to budget within the Smithsonian, because it seemed more logical that it come through one appropriation—ours that is—we agreed, and we set up the same kind of review system as the NSF has.

Of course, we had a program of \$350,000, whereas their program in this particular discipline might be \$10 million, but we also brought in ad hoc outside reviewers, went through the same process of circulating proposals outside, and we promised before this committee that we would make every effort to adhere to exactly the same strictures that their grant process went through, and so we did the best we could.

We would be very happy, we would be delighted, if we could get back on track where we were in 1963, and in fact have our people thrown into the hopper to appeal just as if they were at the university of whatever it was outside of the District of Columbia.

Mr. YATES. Are there other Federal employees who compete for any such scholarships?

Mr. RIPLEY. Only through the realm of any such program which in a programmatic sense has a particular bias toward, let's say, Johns Hopkins University conducting marine observations in Chesapeake Bay. Then our people, who are members of that team under the consortium of Chesapeake Bay, can receive support, but it doesn't go directly to that person.

The same way in the education program, the Associates' program, which has been deemed to be outside the Federal grant-receiving hierarchy, may receive a grant for public education.

Mr. YATES. Why don't you put into the record a description of the 35 projects and applicants?

Mr. CHALLINOR. That were approved and were not funded?

Mr. YATES. That is right.

[The information follows:]

Smithsonian Research Awards Program

Projects approved for
funding in FY 1980

<u>Principal Investigator</u>	<u>Description of Project</u>
Richard Benson	<u>Paleoecology and Crisis in Atlantic "Deep-Sea" circulation</u> --Fossil ostracodes are useful indicators of changes in the seas and oceans of the past. Sudden catastrophic events alter the deep structure of the oceans changing the rate of evolution of the ocean fauna. The long-term effects will be quantitatively studied by the principal investigator.
Richard Ahlborn	<u>The Will of a Woman, 1761</u> --A detailed study will be made of a will and testament of an 18th century woman from Santa Cruz. This study will focus on the cultural change involved with the transfer of property relating to historical minorities: Hispanic, women and colonials.
Mitchell Bush	<u>Antibiotic Pharmacokinetics of Zoological Species</u> --Medical evaluation and treatment of exotic animals have shown marked growth in recent years. With the development of safer immobilizing drugs and techniques, complete physical examination is now feasible. This study plans to investigate the variations in time of drug concentrations in blood to develop schedules of antibiotic dosage for non-domestic animals.
Frederic Chaffee	<u>High Resolution Study of Absorption of Lines in QSO's</u> --The proposed study is to look at certain characteristics in order to determine if those characteristics are intrinsic to quasi-stellar objects (QSO's) or lie in the intervening space between the sun and a QSO. Funds are requested to modify an existing instrument so that the desired measurements can be made, to make measurements/observations and to analyze and publish the early results of this investigation.
Arthur Clarke	<u>Studies on the Ecology, Life History, Systematics and Zoogeography of the Freshwater Mollusks of Central America</u> --Studies on the ecology, life history, systematics and zoogeography will center on an economically important group of fresh water mollusks.

Principal InvestigatorDescription of Project

Don Davis

Investigations on the Phylogenetic Relationships of Major Insect Taxa--Support for illustrations is requested to assist in determining the structure of insects and delineating one microscopic species from another.

Clifford Evans

Prehistoric Human Ecology of the Rio Guapore Area of Western Brazil and the Eastern Lowlands of Bolivia--The development of an archeological sequence in Amazonia and the reconstruction of the prehistory of the region will add basic information for our understanding of the cultural relationships and human ecology of the area.

Richard Fiske

Volcanic-Plutonic Associations in the Minarets Caldera, Sierra Nevada, California--Detailed field mapping, sampling, and geochemical analysis will be carried out in the eroded remnants of the 100-million year old Minarets caldera or basin--the only known place where the magma or liquid rock which solidified to form the granite of the Sierra Nevada mountains erupted to the surface. The findings, when integrated with information already available in the central Sierra Nevada, will provide the first documentation of the near-surface evolution of the granite and its relation to contemporaneous volcanism.

Kurt Fredriksson

The Anatomy of chondrites II: Analyses of Individual breccia constituents and preliminary experimental tests--Stony meteorites called chondrites will be analyzed and the results interpreted in view of the two currently popular theories on the formation of chondrites and planets from the solar nebula. By careful examination of the components of the chondrites, it is hoped that we can learn something about the physical conditions which existed at the time of the formation of the solar system and possibly the universe.

Richard Grant

The Roadian Stage of the Permian: Paleoecology and biostratigraphy--A critical reference area of the Permian rocks deposited in the United States is in West Texas. Controversies over the depositional history of these strata, which are near the oil producing Permian Basin, will be examined through a study of the fossils they contain. Information from this study will aid in correlation from surface exposures into the subsurface of the Basin, which may be potentially helpful to petroleum geologists.

Principal InvestigatorDescription of Project

Herbert Gursky

High Spatial Resolution Imaging and Spectroscopy of Galactic Nuclear Regions--Some kinds of astronomical observations can only be made under conditions of extremely good atmospheric seeing. Such conditions, when the atmosphere is exceptionally stable, are very rare and much valuable telescope time can be wasted waiting for them to occur. Funds are requested to construct a seeing monitor, which by routine of sampling, will identify nights of very good seeing. On such nights the scheduled program on SAO's 1.5-meter telescope at Mt. Hopkins will be interrupted to allow these observations to be made that depend on exceptionally good seeing.

Ronald Heyer

Speciation Patterns of Neotropical Frogs Determined from Quantitative Immunological and Morphological Evidence. II Speciation Patterns in Frog Genus Cyclorhynchus--Molecules and morphology will be simultaneously studied to clarify speciation processes and patterns in a group of neotropical frogs to test the theory that intense species development occurred during the Pleistocene Ice Period.

Duane Hope

A Monographic Study of the Marine Nematode Family Leptosomatidae--A systematic monograph on an important group of marine nematodes will contribute to the understanding of the evolutionary relationships of the species.

John Huchra

Study of Faint Seyfert Galaxies and Emission Line Galaxies--A certain class of galaxies, known as Seyfert galaxies, named after their discoverer Carl Seyfert, have optical properties which are remarkably similar to those of quasars, that is both kinds of objects give off enormous energy relative to their size. In addition, Seyfert galaxies and certain other galaxies are strong x-ray sources. We plan to make certain measurements/observations to better understand the nature of Seyfert galaxies, and much of the data will be on photographic plates. The information on photographic plates will be digitized so that it can be processed on a computer. Since there is expected to be a large quantity of data, the process of analyzing the data could be made extremely efficient if a video display system could be acquired so as to allow interactive (real time interaction with the computer) processing of the data. Funds are requested to purchase a video display system.

Principal InvestigatorDescription of Project

John Kohl

An Initial Measurement of Dielectronic Recombination in C+3--A large class of astrophysical sources has been modeled as hot low density clouds that are heated and ionized and cooled. Theoretical models predict that the ionization balance in these sources is controlled by a process known as dielectronic recombination. However, there have not been laboratory measurements made to prove or disprove the theory. We have already determined that such an experiment is feasible and have designed that laboratory experiment. These laboratory experiments, coupled with telescopic observations, will enable scientists to piece together another aspect of the universe's formation. Funds are requested to purchase the equipment required to assemble an instrument for making the initial measurement and to analyze the data.

Philip Lundeborg

The Emergence of Galvanic Sea Mine Warfare--An in-depth review of the development of galvanic sea mine warfare technology during the first half of the 19th century focuses on the coastal fortification programs undertaken by several continental powers including the United States and Russia.

Raymond Manning

Application of a Micro-computer Word Processing System to Basic Research in Systematic Zoology--Using a large collection of crabs from Ascension Island, the principal investigator will develop a computer data system which will be used to prepare and type a final draft of a manuscript on these crabs. The proposal requests funds for the purchase of a desk top micro-computer/word processor. The capability developed will be applicable to many systematic studies carried out in the museum.

Brian Mason

Investigation of Antarctic Meteorites--The Antarctic has proven to be a treasure house of meteorites where, because of the constant cold temperatures, thousands of meteorites have been preserved without deterioration. The Department of Mineral Sciences receives all meteorite specimens collected by scientific and military personnel in Antarctica. Preliminary research is conducted at the Smithsonian on all specimens received and many of the specimens are sent to other experts for further study. Assistance is requested to help conduct the research and process the specimens, as a national center for meteorite research.

Principal InvestigatorDescription of Project

Ted Maxwell

Comparative Studies of Desert Pavement--The distribution and size range of the desert pavement, a covering of small stones on top of the sand, in interdune areas will be studied to learn about the wind processes responsible for the movement of the stones eroding the desert surface.

Ellen Miles

Catalogue of the Work of Charles Balthazar Julien Fevret de Saint-Memin (1770-1852)--Charles Balthazar Julien Fevret de Saint-Memin (1770-1852), a refugee from France, made over 850 portraits of Americans including Thomas Jefferson, Paul Revere, Charles Willson Peale, George Washington, Merriwether Lewis and John Marshall, keeping proof engravings of each portrait as well as landscape engravings, maps and plans. A large collection of these proofs were donated to the National Portrait Gallery in 1974 by Mr. and Mrs. Paul Mellon. The principal investigator will compile a catalogue of these and other drawings and engravings, the only complete study of Saint-Memin's work.

Richard Montali

Parasite Identification, Life Cycles, Epidemiologic Aspects and Pathologic Effects of Natural Outbreaks of Parasitisms at the National Zoological Park--This project is designed to identify, study the life cycles, the mode of infection, and the harmful effects of parasites that affect animals at the National Zoological Park. The information gained will be used to provide preventative measures and treatments of these parasitic infections, of which currently very little is known.

Crimilda Pontes

Collecting material about artist John Howard Benson from family, friends and partners still living for archival and biological use--John Howard Benson (1901-1956) greatly influenced the lettering arts in the United States through his books and classes and, of course, his own work. A well-illustrated biography will be prepared.

Harrison Radford

Submillimeter Heterodyne Spectroscopy--Because of the recent advances in laser technology it is now possible to construct an instrument which would be very valuable for the observation of discrete astronomical spectra and also for general laboratory spectroscopy, at very short wave lengths, i.e., submillimeter wave lengths. Much of the necessary equipment is available but certain new types of equipment are needed and funds are requested for this purpose.

Principal InvestigatorDescription of Project

Harold Robinson

Materials for Cytotaxonomic and Chemotaxonomic Studies of the Asteraceae--Over 20,000 species are found in the Asteraceae, an important family of plants, distributed in all continental areas except Antarctica. The investigator has studied this group intensively, and has contributed greatly to the understanding of its evolution and diversity. He has concentrated on Latin America, and this work is a continuance of that concentration. Funds are needed to collect new specimens from Ecuador to continue this important study.

George Rybicki

Dynamical Studies of Binary Galaxies--This proposal will study the dynamics of binary galaxies, that is two galaxies revolving around a common center and bound to each other by their mutual tidal attraction. Of interest is how they eventually merge into one galaxy and at what rate this process occurs.

Robert Silberglied

Evolutionary Studies of Anartia Butterflies (Lepidoptera, Nymphalidae)--This proposal will study the zone of hybridization where two species of butterflies of the genus Anartia have recently come together. Areas of intense interaction between closely related species are of particular interest to zoologists. Intense competition usually occurs in these zones and important genetic, ecological and behavioral reorganization may occur as a result of the competition. These phenomena are ephemeral and must be studied immediately before new equilibria are established.

Daniel Stanley

Oceanography and Sedimentology of the Hellenic Trench, Ionian Sea, Mediterranean Basin (MEDIBA) Project--The proposed interdisciplinary research will measure and interpret the physical, chemical and biological factors affecting deep sea sedimentation in the enclosed tectonically active setting of the Ionian Sea.

Charles Whitney

Measurements of Stellar Velocities--The bright pulsating variable star known as R. Scuti shows spectroscopic evidence of shock wave phenomena in its atmosphere as well as infrared evidence for a circumstellar shell. This shell is probably composed of matter ejected from the star, and a detailed study of this star will give insights into the important process of mass-loss during pulsation. We propose to conduct a number of relevant observations at Agassiz Station and Mt. Hopkins using an echelle spectrograph.

Principal Investigator

George Withbroe

Description of Project

To Study Chromospheric-Coronal Energy Balance--A fundamental goal in the study of the physics of the sun is to understand the processes which control the structure and dynamics of the chromosphere, the sun's lower atmosphere, and the corona, the sun's upper atmosphere. One process that is poorly understood is the mechanism by which the corona is supplied with mass. The corona loses mass through outward flow of the solar wind and by downward flow to the chromosphere. Many theories have been proposed as to what the mechanism is which replenishes coronal mass. One of these is concerned with the energy balance at the interface of the corona and chromosphere. We propose to investigate the energy balance at the interface and its implication concerning the heating of the chromosphere and the deposition of mass in the corona.

John Wood

Systematic Study of CA, AL-Rich Inclusions in the Carbonaceous Chondrite--Although high temperature inclusions (grains of exotic material embedded in the meteorite) in the Allende meteorite have been intensively studied in the past, these studies have not produced a truly comprehensive and balanced survey of these important objects. These calcium and aluminum rich inclusions are significant because these are the first minerals that would be expected to condense from a cooling gas of solar composition and the understanding of their formation may have some bearing on the history of the pre-solar system. For example, one cannot conclude with certainty whether the inclusions are chemically complementary to the rest of the meteorite they occur in, or if they constitute an addition to it. Funds are requested to carry out a systematic survey of high-temperature inclusions in the Mokoia carbonaceous chondrite, which is analogous to Allende except that it appears to be unmetamorphosed.

George Zug

Locomotor Behavior in Frogs--Species of frogs show a wide variety of locomotor behavior ranging from swimming through running and walking to jumping. These locomotor behaviors are closely tied to the anatomy of each frog species and the goal of the research is to correlate specific locomotor patterns with particular anatomical structures so better interpretation of frog evolution and classification can be provided.

COST OF WORKS OF ART

Mr. YATES. Is this right, page A-9? That is not the famous Pascin. Is that his drawing?

Mr. RIPLEY. A pencil drawing.

Mr. BLITZER. I don't see how they could have gotten this out of that, but I will check it.

Mr. RIPLEY. If it were Jules Pascin, it would be a lot more money.

Mr. YATES. For a pencil drawing, \$1,500?

Mr. RIPLEY. Yes, because that was late 18th Century.

Mr. YATES. I expect your price for the Edvard Munch was underpriced.

Mr. BLITZER. I think this was a sketchy, random list.

Mr. YATES. I didn't know the Smithsonian worked with sketchy, random lists.

Mr. RIPLEY. We don't do that.

Mr. YATES. That is why I said what I said.

Mr. RIPLEY. We have an earthquake once in a while.

Mr. BLITZER. It is a long way around to make the point.

JOHNSON AND JOHNSON GRANT

Mr. YATES. All right. Let's turn to page 15 of the justification. What is the situation on the Johnson and Johnson Grant? Is there a Mr. Link?

Mr. RIPLEY. Mr. Link and Mr. Johnson. We requested of the Federal Court an opinion and that resulted in a countersuit by Mr. Johnson, in person, and his foundation. The judge rendered an opinion, and this has now been discussed among the lawyers and there is an order which has been published by the judge, and Mr. Powers, behind me, would be happy to explain it to you.

Mr. YATES. Mr. Powers?

Mr. RIPLEY. He stepped out of the room a moment. I could summarize it briefly.

Mr. Powers is here. Mr. Powers, I just suggested to the Chairman that you might like to speak to the order that has been rendered, and the countersuit by Mr. Johnson.

Mr. YATES. What is the status of your suit?

Mr. POWERS. Of course. The decision was rendered about three or four weeks ago, and it called for a suggested order from both of the parties. Those were submitted, and it issued its own order about last week. It tracked pretty much the decision.

I don't know how familiar you are with the Johnson gift. The court divided it into two parts, which we asked them to do.

Mr. YATES. In other words, you won?

Mr. RIPLEY. I think in effect, Mr. Chairman, it was determined that we had been doing exactly the right thing all they way down the course since we had received the money, and so whether we won or not is a determination that only time will tell, but there were two gifts.

Mr. YATES. You went into court for a specific purpose, and the court agreed with you.

Mr. RIPLEY. We went into court to ask them whether we had done right with the money, and we got the determination that, yes, we had done right.

Mr. POWERS. The case arose because there was a genuine dispute about the original terms of the gift. There was one of those cases which was only partly adversary, in which you ask the court to determine the rights of the parties, and I would suppose that it could be said that the court agreed more largely with our view that there were two gifts, that they had different terms, than the position taken by the original donor who, although he had not given half of the money himself, insisted that it was the same as his own gift, and that part the court did not accept, and that was really the core of the argument.

That much is settled, and in that sense we are extremely pleased with the result in the sense that the argument, I think, unless it is appealed, the argument is over.

OBJECTS RECEIVED FROM FEDERAL AGENCIES

Mr. YATES. Now, you tell the committee on page A-15 that you have the legal responsibility of serving as repository for the whole country for archeological artifacts, and so forth. Have you any way of knowing how much or how many of the 75 million objects you have were given by other Federal agencies? It would be very difficult, wouldn't it?

Mr. RIPLEY. I think in a ballpark way we can do it.

Mr. YATES. Can you?

Mr. RIPLEY. For example, archeological objects. We cooperated many years with the Department of Interior on a program called Salvage Archeology. Bulldozers would come to make a shopping center in a state, or a county, and they would discover an Indian mound, and they would rush in, and the Interior Department had a certain responsibility and would attempt to oversee the collection of basic materials. Then we would send out one or more of our staff who were supported largely, at that time, by a grant from the Interior Department, and we would bring these trayfulls and basketfulls of potsherds back with us, the idea being that a documentation would be made before the shopping center went up.

So we had that program, and I think you could say, in sum, all those objects are nationally acquired through the Department of the Interior.

We have other objects which have been given to us from time to time by Interior or by The White House, for example, surplus furniture and things of that sort, when the Committees on The White House were instituted around 1960, initially.

We have a variety of objects taken on exploring expeditions of the government going back to the 19th Century which are quite definitely Federally acquired.

Of course, we inherited the original National Institute which was in the basement of the old U.S. Patent Office, by statute, of course, when the Smithsonian gift was accepted, and much to the irritation of the first Secretary, Mr. Henry, he found himself saddled with the obligation to run a museum.

So that has been a thorn in some of our flesh ever since, but in effect I think through this inventory process the Smithsonian will come out in another two or three years with a far better, real, understanding of what are our repository responsibilities.

I personally, Mr. Chairman, am hopeful that we can reinstitute through this real understanding a measure of ways of putting materials out on loan in an increasing way for scientific, esthetic, cultural or other purposes, and attempting to divest ourselves of some of the accretion of objects which is the passion of every curator, as you know, to squirrel away because all curators are pack rats, and they never want to give anything up.

DEACCESSIONING OF OBJECTS

Mr. YATES. Does the Smithsonian ever give anything up?

Mr. RIPLEY. Yes, we do.

Mr. YATES. How do you do it?

Mr. RIPLEY. It is a matter of deaccession sometimes.

Mr. YATES. You gave up Mrs. Post's Hillwood. You didn't take that. Suppose Mr. Blitzer doesn't like a particular painting in one of the museums and wants to dispose of it. Do you have that power?

Mr. RIPLEY. We have the power in some particular cases. You have to determine which case.

The Hirshhorn collection was acquired by us with power to dispose of, sell, deaccession, any objection in the museum. This was an agreement willingly entered into by Mr. Hirshhorn. Who is to say that a painting bought today is something you would wish to have and feel you could afford to maintain 50 years from now.

So, by setting up the trustees and having them meet and consider acquisitions, we defer the responsibility to them to say, "Do we want it? Don't we want it? Are we going to loan it? Deaccession it? Rent it out? or whatever it might be.

It is wonderful to report that the trustees take this so seriously that they haven't thrown anything away.

Mr. YATES. Where do the Regents come into this?

Mr. RIPLEY. They report to the Regents.

Mr. YATES. The Board of the Hirshhorn report to the Regents. Can they dispose of a painting without approval of the Board of Regents?

Mr. RIPLEY. I think they couldn't—

Mr. BLITZER. The Hirshhorn legislation says that the trustees do have that power.

Mr. YATES. Does the Board of Regents have any control over Hirshhorn?

Mr. POWERS. Yes, except in accessioning and deaccessioning.

Mr. YATES. What about the hiring?

Mr. POWERS. It is done by the Smithsonian.

Mr. YATES. How about Mr. Lerner. Was he selected by the Board of Regents?

Mr. RIPLEY. He was. That came before we had the trustees. I think the trustees, nowadays, if we are going to have a new director, would nominate a director who then would have to be approved by myself, in accordance with my statutory authority as Secretary.

Mr. YATES. What is your relationship with Hirshhorn? You say you have full control, except in the case of acquiring or disposing of, over the Board of Regents. Is this true of the Freer, too?

Mr. BLITZER. In Freer, nothing may be disposed of.

Mr. YATES. Or acquired?

Mr. RIPLEY. Acquired by purchase.

Mr. BLITZER. There is a very elaborate procedure there. I may say that several years ago the Regents adopted an official procedure, I guess is the right word. Depending on the value, the proposed deaccession which would start with a curator, go to the director, to his advisory commission, to me, to the Secretary, and to the Board of Regents. A \$5,000 transaction which would stop at some point, while a \$5 million transaction would certainly go all the way to the Board of Regents before it could be approved.

SMITHSONIAN RELATIONSHIP TO THE NATIONAL GALLERY AND THE KENNEDY CENTER

Mr. YATES. The Board of Regents has this power on the basis of whatever the wills provide for Freer, and the gift for Hirshhorn, right, a specific written agreement.

What is your relationship to the National Gallery and the Kennedy Center? What is your relationship with them?

Mr. RIPLEY. In the case of the trustees of the National Gallery, they have the power to acquire, or theoretically to deaccession wholly, and the Hirshhorn, with the exception of their trustees having accession and deaccession power, was modeled on the particular clause in the National Gallery statute.

But there is no relationship beyond that except for the fact that there is an ex officio statutory relationship with myself being on the board, and the Chief Justice being on their board.

The Regents have no direct control over the decisions or actions of the trustees——

Mr. YATES. Why is that, statute, or by agreement?

Mr. RIPLEY. By statute.

Mr. YATES. Does it say that specifically?

Mr. RIPLEY. It doesn't say they have no power, but says the only requirement is that the trustees of the National Gallery shall submit an annual report to the Regents for publication.

Mr. YATES. Only for publication?

Mr. RIPLEY. Yes.

Mr. YATES. So that you have no control over the National Gallery at all?

Mr. RIPLEY. The Regents cannot send the report back and say they don't approve of it.

Mr. YATES. Is that true of the Kennedy, too?

Mr. RIPLEY. Yes, and that was the fact of the legislation of the time.

Mr. YATES. Why did they make those two institutions part of the Smithsonian, then?

Mr. RIPLEY. I think it an open question in the case of the Kennedy Center. I think it was assumed that the Smithsonian was a kind of a cultural center in itself, and if there were to be cultural center set up in Washington, the interests of the Smithsonian, going back to 1904, when the first suggestions had been made for cultural center to be built where the National Gallery is now, had always

been implicit in the actions that would lead to the setting up of such a center.

So it was a kind of a grace note, or perhaps like a courtesy, it was associated with the general umbrella of the Smithsonian, but for no actual purpose.

MR. HUGHES. I looked into this a couple of years ago, as you may recall. The Smithsonian in one or more of these cases is in the nature of a receiver for the institution, should something happen with respect to the institution.

MR. YATES. Suppose Kennedy can't raise enough money for its operation?

MR. RIPLEY. It is in the statute that it is supposed to be turned over to the Smithsonian if they go broke.

MR. YATES. The Kennedy?

MR. RIPLEY. Yes.

MR. YATES. The Kennedy is not paying its bonds, its interest. It is probably close to \$18 million in debt now on the bonded interest, and it is trying to get another arrangement for paying less in terms of the maintenance of the institution. Are you allowed to apply for a receiver?

MR. RIPLEY. We are in effect under the statute, I suppose, if it was determined that it was in receivership, then they would have to——

MR. YATES. They would have to appoint you as receiver?

MR. RIPLEY. They would have to refer to the Smithsonian in some form.

MR. YATES. That will never happen, of course.

But, you know, when you stop to think about it, perhaps the Kennedy statute, if it is going to be amended, perhaps there ought to be some kind of a situation where perhaps some of the Smithsonian's appropriations flow through for the Kennedy just as they flow through now to Hirshhorn, Freer and your other institutes.

MR. RIPLEY. They are much more closely bound to use by legislation than the Kennedy is.

MR. YATES. Yes, but it is up for amendment.

MR. RIPLEY. It would have to be legislated, I would assume.

MR. YATES. That is why I wanted to know how closely you worked. Actually, you are distant cousins?

MR. RIPLEY. Kissing kin.

MR. YATES. I don't think you are even kissing kin. I don't know what you "kin" do, but you sit on the board?

MR. RIPLEY. Yes, and offer advice when asked, and sometimes consent, but I occupy no other real position.

MR. HUGHES. It seems to me you could characterize the arrangement as permitting cooperation, but not assuring it.

MR. YATES. I don't know why it is part of the Smithsonian, then.

MR. HUGHES. I think "Smithsonian" is a useful name, and the receivership function may be a useful one.

MR. YATES. Mr. Powers?

MR. POWERS. Mr. Chairman, in the legislative history of the Gallery, there seemed to be a desire to have the Gallery have the benefit of the trust relationship of the Smithsonian to the United States, and the Galley——

MR. YATES. How does that work?

Mr. RIPLEY. That was quite explicitly stated in the beginning of the discussion of the legislation. It was assumed that the Gallery, and Mr. Powers can correct me if I am wrong, it was assumed that the Gallery must be accepted as an entity, so the paintings were deeded to the Smithsonian for administration by a board to be set up, the land was acquired for the Smithsonian for purposes to be set up in the form of a gallery to be erected to be called the National Gallery of Art, with an accessory piece of land in case they needed any extension land.

Then, once that had happened, the ensuing legislation quite clearly spelled out the power of the Board of Trustees, and the Board of Trustees then proceeded to have power to act to take, as it were, control of these gifts to the nation made in the name of the Smithsonian, and carry out their own program, and I think the trust aspect is particularly important, because the paintings are held in trust, as it were, for the nation, via this initial act, and the gifts of money which produced the building and subsequent endowment funds are held in trust by the United States, which pledges the faith of the people of the United States to defend them.

And this precept emanated from the initial inception by Congress.

Mr. YATES. Do you have any specific responsibility to the National Gallery?

Mr. RIPLEY. No, I wouldn't say that, unless, I suppose, again, they went into receivership or something of this sort. Because the initial act gave the land, deeded the land, and Mr. Mellon's gift of 32 paintings, or whatever it was to the Smithsonian, for the purpose of setting up this gallery.

Mr. YATES. Once you set it up, your responsibilities were over?

Mr. RIPLEY. Once you set it up, then the trustees take over, and there is, of course, that mysterious link that two of the trustees are Smithsonian people. That is, the Chief Justice as "ex officio" chairman of the board, and myself as secretary of the board.

GIFTS TO THE SMITHSONIAN INSTITUTION

Mr. YATES. Did you receive any monetary gifts last year for your special purpose funds?

Mr. RIPLEY. I think it was \$2.5 million, and then we did not give you the valuation of the gifts in kind, paintings and other things.

Mr. YATES. What was the value of the FONZ gift?

Mr. KENNEDY. A vast cultural value, but the exact monetary value would have to be set by a haberdasher.

SMITHSONIAN ASTROPHYSICAL OBSERVATORY

Mr. YATES. Let's turn to the Smithsonian Astrophysical Laboratory. That is geoastronomy, not gastronomy, right? You don't have anything to do with the space telescope?

Mr. CHALLINOR. We are designing equipment that will go into the space telescope when and if it gets launched, but I understand it has been postponed another year or two now.

Mr. YATES. You operate the multi-mirror telescope, which is located on the mountain in Arizona, right?

Mr. CHALLINOR. That is correct.

Mr. YATES. And you have an arrangement with the University of Arizona to operate it?

Mr. CHALLINOR. We have a contract with the University of Arizona to operate it in our behalf.

Mr. YATES. Operate it in your behalf? Why do you need the University?

Mr. CHALLINOR. This would be the operation of the telescope, the motors and gears and all the things that make it run.

What we are anxious to do now, as you recall, is to have the scientists now use it. We got, for the last several years, from the Congress \$750,000 in our base to build it, and as you recall, last year through Senator DeConcini's help we got another \$300,000. So now we have \$1.05 million, to operate the telescope, but as the telescope nears completion, its expenses are more concerned with its use. To use the telescope now that it is built, we need people who are experts to look through the telescope and tell us what they see.

That is why in this case we are asking for three positions with no money. The money that will pay these positions will come from the million dollars that we have from the Congress, that we have had to build it.

We are looking for two galactic astronomers and one infra-red astronomer, but no money to pay them. Their salaries are in our base, and that was the base that was used to construct the telescope in the first place.

You will notice there is one other position to make fulltime permanent an upward mobility slot that we have been supporting on a temporary basis now for the last few years.

Mr. YATES. I must say that your justification makes interesting reading. Tough, but interesting. [Laughter.]

DETECTORS

You say detectors are devices which convert visible light and infra-red radiation into visible signals, which are then analyzed to extract the desired information. You have to read that twice.

Mr. CHALLINOR. That device allows a small telescope today to see what Mount Palomar saw 25 years ago. Units of light called photons are collected from distant stars in a lens. If we try to see them in terms of light, they are so faint it doesn't work very well.

So we simply take these photons of light, convert them into electrical impulses and create an artificial photograph with these odd photons of light coming in. We can do this with a computer, and in effect "see" objects that we had no idea were out there, because we now have devices to beef up existing telescopes.

They can assemble light for us to see artificially, in a sense, new electrical impulses.

Mr. YATES. These are called detectors?

Mr. CHALLINOR. Yes.

Mr. YATES. Why didn't you say that?

Mr. CHALLINOR. We were trying to explain it. These detectors are now 3 percent efficient. If we get them up to 25 or 30 percent efficient, we can see orders of magnitude better than we can see now.

Mr. YATES. What is the detector program likely to cost?

Mr. CHALLINOR. We asked for \$84,000 to start up the program. We would like to bring them up to 50 or 60 percent efficient in future years, the evolution of these detector devices.

Mr. YATES. As this evolves, what do you hope to accomplish? Do you hope to go out farther?

Mr. CHALLINOR. To see farther and farther into space and, if there is such a thing, to see the edge of the universe.

Mr. YATES. Really?

Mr. CHALLINOR. If there is an edge, we will then see the beginning of time.

Mr. HUGHES. How does that grab you?

Mr. YATES. I think I will go vote on that one. [Laughter.]

I will ponder that, or is that one of the imponderables?

Mr. CHALLINOR. It can be explained. If the 2.4 meter space telescope is launched, then there might be a chance to see the edge of the universe, if there is an edge.

In other words, if we can see a star beyond, which we can see no further stars in that star, then we would "see" the beginning of time.

Mr. YATES. Kind of like a bridge too far?

Mr. CHALLINOR. Put it that way. In other words, light from that star——

Mr. YATES. Somehow I get a vision in my eye when you talk about seeing the edge of the universe, about earth being flat.

Mr. CHALLINOR. Well, this is what I carefully said, "if there is an edge."

Mr. YATES. If there is, okay, this is what is called the edge of darkness? Or the edge of light?

Mr. CHALLINOR. Both.

WEDNESDAY, MARCH 12, 1980.

SMITHSONIAN ASTROPHYSICAL OBSERVATORY DETECTOR PROGRAM

Mr. YATES. The hearing will come to order. Yesterday we were talking when we adjourned to Mr. Challinor about the edge of darkness or light where the spaceships fall off the edge of something. Do you want to embellish your remarks?

Mr. CHALLINOR. I hope that we understood that that statement is based on certain premises, Mr. Chairman, one being that there was a beginning to the universe and that if there was a beginning, we might be able to find the edge or the beginning.

Mr. YATES. Five premises.

Mr. CHALLINOR. In other words, if we saw the last star, we would see something the light from which has traveled further and for a longer time than from any other place.

Mr. YATES. Well, of course, we all assume that that was the premise.

Mr. CHALLINOR. Not everybody.

Mr. YATES. Oh, really? Did you have some discussions around?

Mr. CHALLINOR. There are scientists who disagree with the premise of what is called the "big bang."

Mr. YATES. I'm not sure where this is leading. What do you mean by the "big bang?"

Mr. CHALLINOR. That is the explosion that started the universe, or the theory of how the universe might have started.

Mr. YATES. Yes. How do we relate that to the budget?

Mr. CHALLINOR. Because the Smithsonian Astrophysical Observatory and the scientists there spend a great deal of time and energy looking at astronomical phenomena in trying to understand whether, indeed, that event did occur.

Mr. YATES. Did they reach a conclusion?

Mr. CHALLINOR. Many of them have.

Mr. YATES. And, that was the basis for your statement, then? You sided with the majority?

Mr. CHALLINOR. I sided with the majority. You asked me what they were doing and I was trying to explain some of the things that they are doing up there.

ACHIEVEMENTS AT SMITHSONIAN ASTROPHYSICAL OBSERVATORY

Mr. YATES. That clarifies it. I notice that on page A-23 of the justification that there is a list of achievements. You opened successfully and you launched the Einstein satellite with a high-resolution telescope capable of focusing images of x-ray sources. Production and analysis of the x-ray data from the Einstein satellite, coordination of the Guest Investigator Program for the Einstein satellite. Don't you use the telescope in conjunction with Harvard University? I know you do in conjunction with Arizona. They operate it for you.

Mr. CHALLINOR. They operate it with us in a cooperative venture. The telescope is at the top of Mt. Hopkins. Now, at Harvard University we share facilities at Cambridge, Massachusetts, with the Harvard College Observatory.

Mr. YATES. Do they not join with you in your various exercises in Arizona?

Mr. CHALLINOR. A few of the scientists at Harvard do, indeed, join in with us in using the multiple-mirror telescope.

Mr. RIPLEY. Yes. And I might add, Mr. Chairman that many of our scientists at Harvard hold joint appointments between Harvard and the Smithsonian, and one of them this year, Dr. Challinor can mention, received a Nobel Prize for some of this work in high-atmospheric studies, x-ray sources. Isn't that true?

Mr. CHALLINOR. Steven Weinberg was one of the Nobel laureates who has an appointment at the Smithsonian Astrophysical Observatory as well as a professorship at Harvard.

Mr. YATES. And as well, the Nobel Prize.

Mr. CHALLINOR. And as well as the Nobel Prize.

Mr. YATES. You say he is here?

Mr. CHALLINOR. He is not here. He is in Cambridge, Massachusetts.

Mr. RIPLEY. He is not here today. I just thought that the level of recognition of these scientific studies is very high and has been recently confirmed by this Prize.

Mr. YATES. Is he a member of the majority?

Mr. CHALLINOR. Yes, he wrote a very good book called "The First Three Minutes," in which he describes what he thinks happened in the first three minutes of the universe.

Mr. YATES. Do you have a copy of it?

Mr. CHALLINOR. I do. I would be happy to send you one.

Mr. YATES. Thank you very much. I will try to read it.

Mr. CHALLINOR. It's hard.

Mr. YATES. Do I have to be a PhD to read it?

Mr. CHALLINOR. No.

Mr. YATES. Do I have to be an MS to read it?

Mr. CHALLINOR. No, you just have to concentrate very hard when you read it. You can follow it.

Mr. YATES. You had a successful balloon flight with an infrared spectrometer developed by Smithsonian for use on a balloon-borne telescope, continued improvements on the hydrogen maser. Is that as opposed to a laser?

Mr. CHALLINOR. A hydrogen maser is an atomic clock that tells time very accurately and by very accurately, I mean that it will not vary more than a second in 20 million years.

Mr. YATES. You have the continued design and development of a small helium-cooled infrared telescope planned for flight in the Spacelab II mission of the space shuttle program. Well, you are going to design it. You don't know whether or not it will take off, do you?

Mr. CHALLINOR. That, we understand has been postponed for some years. Just how long we do not know.

ENERGY CONSERVATION

Mr. YATES. What is Smithsonian doing about our energy problem? Anything in the scientific field.

Mr. CHALLINOR. Mr. Chairman, one of the things we are proposing is the Smithsonian National Awareness Program which we

discussed yesterday. To pull together some of the research we are doing both here at the Astrophysical Observatory which spends a great deal of time on solar physics as well as Radiation Biology Laboratory, which we have not come to in the book yet, which is doing work on the efficiency of solar heating panels right here in the Washington, D.C., area.

Mr. YATES. I keep thinking that, after reading about your advances in space, suggest if we could bring you back to earth and turn you loose on an automobile program, maybe you could develop an engine that would go a hundred miles on a gallon of gas, or something.

Mr. CHALLINOR. I'm afraid that that is somewhat outside our field.

SIPUNCULIDS

Mr. YATES. That's outside your field. What about that little animal that burrows through rocks.

Mr. CHALLINOR. It is alive and well in Fort Pierce, Florida. The sipunculid.

Mr. YATES. The sipunculid, right. I saw him down there. And, he is alive and well. Now that Judge Powers has settled your dispute with Johnson, he probably is in better health, isn't he?

Mr. CHALLINOR. We trust that all of them will be, yes.

ADDITIONAL RESPONSIBILITIES AT SMITHSONIAN TROPICAL RESEARCH INSTITUTE

Mr. YATES. Let's go back to Mr. Rubinoff and Smithsonian Tropical Research. Mr. Rubinoff, you are asking for additional funds and additional positions for the Tropical Research Institute. Did you know that when the Panama Treaty was approved between Panama and the United States that you would be required to have as many positions as you are requesting?

Mr. RUBINOFF. We anticipated additional expenses but since arrangements between the two nations were not clear and in some cases still are a little bit murky, it was difficult to anticipate exactly how much additional personnel and money we were going to need to operate in that area.

Mr. YATES. Yes.

Mr. RIPLEY. Part of the problem, Mr. Chairman, is the fact that while the United States controlled the Panama Canal Zone and had, in effect, a government there, there were obvious advantages for Americans such as our own staff living in the Zone area in terms of costs, cost of food, as the Canal Zone Company had their own PX. The ordinary living expenses were very considerably lessened by the impact of the United States facilities there, and in addition, there was a set kind of salary scale system which was favorable and to which we adhered and maintained comparability. Now, we are sort of out in front, as it were, on the fringe of things in terms of expenses, and cost of living conditions do affect our budget, I'm afraid. I think, Mr. Rubinoff—

Mr. RUBINOFF. Yes, we have converted our employees to a schedule from a Canal Zone-based schedule to the GS schedule here in Washington. We will track that.

Mr. YATES. Who took care of these expenses before the Treaty was signed?

Mr. RUBINOFF. They were benefits that we derived from working in an essentially U.S. territory, for all intents and purposes. There were these commissaries.

Mr. YATES. Did the Smithsonian pay for that?

Mr. RUBINOFF. We paid for some of these services, but not for others. For instance, the lawn maintenance which is all year around in the tropics, was taken care of by the Panama Canal Company. We now have to absorb those costs. Things of that sort. Protection is still an unknown, whether when the canal——

Mr. YATES. Is that true of the STRI facilities investment, too?

Mr. RUBINOFF. No, we had to maintain those.

Mr. YATES. At all times.

Mr. RUBINOFF. Yes.

Mr. YATES. Now, is it possible that in your next budget request you will ask for additional personnel?

Mr. RUBINOFF. It is possible.

Mr. YATES. Has OMB cut you? Or, did you get everything you wanted from OMB.

Mr. RUBINOFF. We have everything we asked.

Mr. YATES. Is it possible that you will be expanding more in the next budget?

Mr. RUBINOFF. No, there is only one possibility that I can foresee and that is the question of the applicability of the Panamanian social security system which threw out X amount of employees before the Treaty. This is still being resolved legally and diplomatically. If it turns out that we are liable for that, there would be an additional cost there, also subject to the U.S. Civil Service Retirement System. There is a question of whether we would be obligated to pay their Panamanian social security system as well. That is an open issue at the moment.

REQUEST FOR GAME WARDENS

Mr. YATES. I have the impression that the number of game wardens that you are asking is greater than that requested or needed by the Fish and Wildlife Service. I remember your testimony yesterday in which you pointed out the squatters and the poachers and other dangers that may come to the park. But, in the United States, the Fish and Wildlife Service has to deal with the same kind of dangers. How do you arrive at the numbers of people?

Mr. RUBINOFF. It is a perception of the area that has to be covered, of the distance travelled, over water in many cases in the lake, and the frequency which we think the area needs to be inspected.

Mr. YATES. Well, you have got a picture of the Barro Colorado Island Nature Monument on page A-26.

Mr. RUBINOFF. That area is about the size of Washington, D.C.

Mr. YATES. The whole area?

Mr. RUBINOFF. Right. Including the water between us and the mainland.

Mr. YATES. That is not very large, is it?

Mr. RUBINOFF. Well, for 16 game wardens, that is a lot of area. If you look at the number of policemen running——

Mr. YATES. Where do you find most of your invasions taking place?

Mr. RUBINOFF. We arrested two poachers on the Bohio Peninsula on the northern part.

Mr. YATES. What were they poaching?

Mr. RUBINOFF. They were poaching a small mammal called a paca, which is very good to eat. They were arrested just Monday night, I believe, or Sunday night. They have already been sentenced to 60 days in jail, so the Panamanian Government seems to be very interested in——

Mr. YATES. How many invasions did you have last year by poachers or squatters?

Mr. RUBINOFF. I think, the number is relatively low and that, I think, is a measure of how effective our control force has been. Of course, we had a much smaller area to patrol before the Treaty, October 1. We had, perhaps, half a dozen or so.

Mr. YATES. The staff shows me the statistics for the 48,000 acre refuge at Delta Breton and it has a staff of three people. The million and a half acre desert national wildlife refuge outside Las Vegas has a staff of five. Maybe there is not as much to poach there.

Mr. RUBINOFF. Yes perhaps, not as much to poach. It is also very difficult to conceal yourself on a desert. In the tropical forest, as we should have learned in Viet Nam, it is very easy to conceal any——

Mr. YATES. You don't intend to use Orange-Red?

Mr. RUBINOFF. No.

Mr. YATES. Get rid of the police.

Mr. RUBINOFF. It would make it easier to patrol. I'm sure the army would be happy to help us with this experiment.

Mr. YATES. I'm sure of that.

TROPICAL DEFORESTATION

Mr. RUBINOFF. If I might add, Mr. Chairman. We spoke yesterday and today of a perception of a problem concerning energy. A problem that, I think, is amenable to a technological solution. I think there is an insidious and less well known problem and that is of tropical deforestation, for which there is no technological solution. Once these organisms become extinct, there is no way to bring them back. These tropical forests influence our climate, in the future they may influence our food sources, as well.

TROPICAL RESEARCH INSTITUTE BUDGET JUSTIFICATION

Mr. YATES. I want to congratulate you and Mr. Ripley and everybody who participated in drawing these justifications. They really ought to be used either by high school or college. I noticed, for example, that your justification for your program on page A-27, where you say, "The tropics are considered to be the cradle of life. Studies conducted there are aimed at learning about the evolution of life. By studying organisms in complex tropical environments, a better understanding of life in temperate zones is gained as well.

Life on this planet represents a continuous interacting spectrum from one polar region to another. Unfortunately, the tropics are little understood, having received relatively little attention from scientists."

I'm afraid they are little understood by Members of Congress, too, I might add.

"In spite of the fact that human populations are growing at a faster rate in this region than anywhere else, this growth is threatening the tropics before they can be adequately studied and methods must be derived to protect this heritage of tropical diversity." Then you go on and talk about what the scientists at Smithsonian propose to do there. I found it very interesting, especially your discussion of *Jenneria Postulata*. For those of you in the audience who aren't familiar with the *Jenneria Postulata*, it is a small gastropod that feeds on live coral. Or, should I take for granted that the Smithsonian staff knows that?

You go on to say that the *Jenneria* do not have as many enemies in the Atlantic. It is possible that when introduced there, they may be able to increase their population sizes to the detriment of Atlantic coral reefs. These studies may soon take on—

PLANT AND ANIMAL COLONIZERS

I visited the wildlife over the last several years. We have been to Florida, and we visited the wildlife refuges in Florida and they talk about the invasion of plants there. The Australian *Malaluca* that are growing beyond control. They were brought in originally as ornamental plants and now there is no way they have of controlling them. Then, there were the walking fish. They invaded Florida as well.

I wonder whether your studies are devoted to things of this kind.

Mr. RUBINOFF. Many of our studies have looked at organisms that are potential colonizers of the Atlantic or the Pacific through a sea-level canal.

Mr. YATES. And, as a matter of fact, don't I remember, Dr. Challinor's testimony a few years ago saying that part of the reasons for not building the level canal was because of the possibility of the introduction of sea snakes from the Pacific to the Atlantic. Is my memory right?

Mr. CHALLINOR. Yes.

DEFORESTATION IN PANAMA CANAL WATERSHED

Mr. RUBINOFF. I have some some photographs here of some of the organisms in question, organisms we hope to keep out.

Mr. RIPLEY. Dr. Rubinoff has some pictures.

Mr. RUBINOFF. Before we get to that, if I can pass these to the Chairman. These are pictures of the deforestation in the Panama Canal watershed, an area which was under the protection of the U.S. Army and the Panama Canal Company with much greater staffs than we have. It is a question as to whether you are anxious to preserve the area or not. It's not hard to see from those that the runoff from the next rains will siltup the lake. Although, one photograph is an area—

Mr. YATES. Why would this have happened?

Mr. RUBINOFF. This is not in the Canal area. This is a central part of Panama.

Mr. YATES. Why would this have happened?. Who cut these down?

Mr. RIPLEY. Agriculturists.

Mr. YATES. Pursuant to licenses granted by the government?

Mr. RUBINOFF. No, no.

Mr. RIPLEY. Agriculturists. These are squatters invading the forests. This will eventually destroy the lake.

AGREEMENT BETWEEN THE UNITED STATES AND THE GOVERNMENT
OF PANAMA

Mr. YATES. Do you have the responsibility now of preventing things like this?

Mr. RUBINOFF. For 12,000 acres, yes, Sir.

Mr. YATES. And, that is pursuant to agreement between the United States and the Government of Panama?

Mr. RUBINOFF. That is correct.

Mr. YATES. Of the Treaty?

Mr. RUBINOFF. Yes. I have the relative sections of the exchange of notes here if you would like to have them for the record.

Mr. YATES. May we see those? If we don't put them in the record, I will put them in our files. How voluminous are they? Not very. Okay. They may go into the record at this point.

[Material to be supplied follows:]

Agreement Pursuant to Article VI of the Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere

make desirable a further agreement between them to ensure preservation of this biological reserve;
Have agreed upon the following:

The Governments of the United States of America and the Republic of Panama,

Recalling that both are parties to the Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere of October 12, 1940;

Desiring to promote and advance the purposes of that Convention;

Noting that Article VI of the Convention provides that the Parties may, when circumstances warrant, enter into agreements with one another in order to increase the effectiveness of their collaboration to this end;

Aware of the unique importance to the international scientific community of the biological reserve located at Barro Colorado Island in Gatun Lake in the Republic of Panama; and

Considering that the Panama Canal Treaty and related agreements signed this date between them

ARTICLE I

1. The area known as Barro Colorado Island in Gatun Lake in the Republic of Panama is declared to be a Nature Monument as defined in Article I of the Convention, to be known as the Barro Colorado Nature Monument. Upon the termination of the Panama Canal Treaty signed this date, this Nature Monument shall also include the adjacent areas known as Orchid and Point Salud Islands; Bohio, Buena Vista, and Frijoles Points; and the smaller islets adjacent to them. The aforementioned adjacent areas shall be made available during the life of the Panama Canal Treaty for the purposes of this Agreement, through the issuance of land use licenses, as provided for in Article IV of the Agreement in Implementation of Article III of the Panama Canal Treaty. The Republic of Panama shall issue an

appropriate land use license or make other arrangements to afford similar use of the peninsula immediately south of Maiz Island, which, upon termination of the Panama Canal Treaty, shall also become a part of the aforementioned Nature Monument.

2. As used hereafter in this Agreement, the term "Nature Monument" shall refer to the Nature Monument defined in paragraph 1 of this Article.

ARTICLE II

The Governments pledge themselves to seek, in accordance with their respective national legislative processes, such legislation by each of them as may be necessary to ensure the preservation and protection of the Nature Monument as envisioned in the Convention and to take no action which would derogate in any way from its protected status, except as hereinafter provided.

ARTICLE III

The Governments agree to collaborate in use of the Nature Monument for the purposes of scientific research and investigation, and to assist each other's scientists and scientific institutions in carrying out such activities in the Nature Monument. The Governments shall agree from time to time on such arrangements as may be mutually convenient and desirable to facilitate such collaboration.

ARTICLE IV

The Governments agree that, consistent with the purposes of Article VI of the Convention, they shall make available to all the American Republics equally through publication or otherwise the scientific knowledge resulting from their cooperative efforts to establish and maintain the Nature Monument.

FOR THE UNITED STATES OF AMERICA:

ELLSWORTH BUNKER

SOL M. LINOWITZ

ARTICLE V

The Governments, mindful of their mutual interest in the efficient operation of the Panama Canal, agree that, in executing their responsibilities under the Panama Canal Treaty, they shall take account of this Agreement. It is understood that use of areas included in the Nature Monument for the purpose of maintaining existing facilities relating to the operation of the Panama Canal shall not be considered to derogate from the protected status of the Nature Monument. In the event either Government at any time considers that the efficient operation of the Panama Canal necessitates any other action materially affecting any part of the Nature Monument, the Governments agree to consult promptly and to agree to measures necessary for the protection of the overall integrity of the Nature Monument and furtherance of the purpose of this Agreement.

ARTICLE VI

The Governments agree that they shall jointly transmit copies of this Agreement to the Inter-American Economic and Social Council of the Organization of American States, and shall request that the Organization notify the Contracting Parties to the Convention of this Agreement.

ARTICLE VII

This Agreement shall enter into force simultaneously with the entry into force of the Panama Canal Treaty, and shall remain in force for ten years and, thereafter, for as long as both Governments are parties to the Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere.

DONE at Washington, this 7th day of September, 1977, in duplicate, in the English and Spanish languages, both texts being equally authentic.

FOR THE REPUBLIC OF PANAMA:

RÓMULO ESCOBAR BETHANCOURT

ARISTIDES ROYO

Exchange of Notes Relating to Scientific Activities in Panama of the Smithsonian Tropical Research Institute

DEPARTMENT OF STATE
WASHINGTON

SEPTEMBER 7, 1977

EXCELLENCY:

As you are aware, the Smithsonian Tropical Research Institute, a trust instrumentality of the United States of America, hereinafter called "the Institute," has, for several years, carried out experimental and research activities of an exclusively scientific nature in various parts of the Republic of Panama. Those activities are described and authorized in Contract No. 1, January 5, 1977, signed by Dr. Abraham Saied, Minister of Health, and Dr. Ira Rubinoff, Director of the Institute. As set forth in the seventh clause of the contract, its duration is indefinite, but it may be terminated if one of the parties so desires, provided that it notify the other one year in advance of the date selected for termination.

Despite the foregoing, it is obvious that the Institute's legal situation and the development of its activities will be affected by the entry into force of the Panama Canal Treaty and related agreements, signed September 7, 1977 by representatives of the Republic of Panama and the United States of America. In anticipation of that eventuality, I thought it pertinent to propose to you, in compliance with precise instructions from my Government, that the Republic of Panama and the United States of America agree on the Institute's continuation of its scientific activities in the Republic of Panama, after entry into force of the Panama Canal Treaty and related agreements, in accordance with the provisions of the above-mentioned contract and in order to achieve the objectives therein set forth.

The agreement which I present to you for consideration would remain in effect for five years from the date of the entry into force of the Panama Canal Treaty and would be extended automatically for 5 year periods until either Government gave notice of termination, at least one year before the date of automatic extension.

I consider it advisable to propose to Your Excellency that if one of the parties to the contract should wish to terminate it on the basis of the seventh

clause thereof while the Panama Canal Treaty is in force, our Governments agree that, unless there is a mutual understanding to replace the contract, the contract and the agreement proposed in this note shall remain in force.

It could also be agreed, and I so propose to Your Excellency, that, if either party wishes to terminate the aforementioned contract after the expiration of the Panama Canal Treaty, our Governments shall immediately initiate consultations concerning the future legal situation of the Institute and its facilities, properties, and personnel in the Republic of Panama, before the contract expires.

With respect to facilities and land and water areas in various parts of the Isthmus of Panama listed and described in the annex to this note, the use of which has not been granted by the Republic of Panama to the United States of America by any other means, I propose that they be made available to the Institute for its exclusive use. It is understood that this agreement will not affect the right of the parties to the contract to enter into subsequent agreements on the terms of the Institute's utilization of other facilities and land and water areas in the Republic of Panama which the latter may consider it desirable to make available to the Institute for the uses and purposes defined in the contract.

I wish to propose that our Governments agree that, as long as the Panama Canal Treaty remains in force, the United States of America may permit the Institute to use any portion of the lands and waters, and of the facilities located therein, situated within the land and water areas the use of which is granted by the Treaty to the United States of America, for purposes of the aforementioned contract, subject to terms and conditions consistent with the Panama Canal Treaty, as the United States of America may define them.

I further wish to propose to Your Excellency that upon cessation, under the Panama Canal Treaty, of the right of the United States to use any land and water areas and facilities located therein which are being used by the Institute, our Governments immediately begin talks intended to reach agreements permitting the Institute to continue to use such areas or facilities.

The possibility should be considered, Your Excellency, that the Republic of Panama may establish procedures whereby any natural or legal person could acquire, in accordance with the laws of Panama, title to land and water areas or properties located

therein which were formerly a part of the territory constituting the Panama Canal Zone. I therefore propose to you that, such being the case, our Governments agree that the Republic of Panama, subject to the applicable laws, shall grant the Institute rights, other than real property title, with respect to any land and water areas or properties in use by the Institute at the time when such procedures are established. These rights will be granted by the Republic of Panama by an agreement or other means not less favorable than the most favorable granted by the Republic of Panama to any other natural or juristic person.

Finally, Your Excellency, I should like to propose that in the event that the Republic of Panama does not establish such procedures for transfer of title to land and water areas or properties located therein to natural or legal persons other than the Government of the Republic of Panama, the two Governments agree that the Government of the Republic of Panama shall place at the disposal of the Institute, free of cost, the use of all areas and facilities referred to in this letter, and any others that may be used by the Institute for the purposes defined in the aforementioned contract.

An exception will be made for cases in which the two Governments or the parties to the aforementioned contract might reach a mutual agreement on other terms.

If the aforementioned proposals relating to the operation in the Republic of Panama of the Smithsonian Tropical Research Institute are acceptable to your Government, I should like to propose that this note and Your Excellency's affirmative reply constitute an agreement between our Governments concerning this matter.

Accept, Excellency, the renewed assurances of my highest consideration.

For the Secretary of State:
 ELLSWORTH BUNKER
 Ellsworth Bunker
Ambassador at Large

His Excellency

RÓMULO ESCOBAR BETHANCOURT,
Chief Negotiator.

ANNEX

The following facilities and lands and waters shall be made available for the continued exclusive use of the Smithsonian Tropical Research Institute.

1. Smithsonian Tropical Research Institute Headquarters, shops, administrative offices, cages and laboratories on Gorgas Road.

2. Tivoli Site. Comprises approximately 4.8 acres at the site of the former Tivoli Hotel and adjacent Tivoli Kitchen structure.

3. Naos Island. All facilities and areas being used by the Smithsonian Tropical Research Institute on the date the Panama Canal Treaty enters into force.

4. Flamenco Island. All facilities and areas being used by the Smithsonian Tropical Research Institute on the date the Panama Canal Treaty enters into force.

5. Pipeline Road Reserve. Approximately 37 acres of land near Pipeline Road at coordinates PA 391116 (Sheet 4243 II, Gamboa).

Translation

EMBASSY OF PANAMA
 WASHINGTON, D. C. 20008

SEPTEMBER 7, 1977

EXCELLENCY:

I have the honor to refer to Your Excellency's note of today's date concerning the activities of the Smithsonian Tropical Research Institute in the Republic of Panama, which reads as follows:

[There follows Ambassador Bunker's note, quoted in English.]

I have the honor to confirm the acceptance by my Government of the proposals contained in this note and its agreement that your note and this reply shall constitute an agreement between our two Governments.

Accept, Excellency, the renewed assurances of my highest consideration.

RÓMULO ESCOBAR B.
 Rómulo Escobar Bethancourt
Chief Negotiator

His Excellency

ELLSWORTH BUNKER

Ambassador at Large

of the United States of America.

**Exchange of Notes Relating to Custodianship of
the Barro Colorado Nature Monument by the
Smithsonian Tropical Research Institute**

DEPARTMENT OF STATE
WASHINGTON

SEPTEMBER 7, 1977

EXCELLENCY:

I have the honor to refer to the Agreement pursuant to Article VI of the Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere, and to the Panama Canal Treaty and related agreements signed on September 7, 1977 by representatives of the United States of America and the Republic of Panama. Article III of the Agreement relating to the Convention on Nature Protection provides that our Governments may agree from time to time on such arrangements as may be mutually convenient and desirable to facilitate their collaboration in the use of the Barro Colorado Nature Monument for the purposes of scientific research and investigation.

I consider it desirable within the spirit of the aforementioned Convention and for the purposes of the Agreement based thereon that our Governments agree that the Smithsonian Tropical Research Institute (STRI), a trust instrumentality of the United States of America, which I shall hereinafter call the Institute, be designated by both Governments as custodian of the Barro Colorado Nature Monument. I propose that our Governments further agree that the Institute shall, during the period of its custodianship, have sole responsibility to act on behalf of our Governments in authorizing use of the Nature Monument for the purposes of scientific research and investigation and for its protection as envisaged in the aforementioned Convention and our Agreement based thereon. In the event that one of the Parties should attempt to take any action related to the efficient operation of the Panama Canal as provided for in Article V of our Agreement, I propose that the Institute, as custodian, be advised in advance and invited to comment on the potential impact of such action on the overall integrity of the Nature Monument.

I consider it desirable and to that end I propose to Your Excellency that, during the period of its

custodianship, the Institute be authorized to employ scientific and support staff, to include game wardens, as necessary to enforce such laws and regulations as may apply to the protection of the Nature Monument. Persons violating the integrity of the Nature Monument contrary to the provisions of such laws or regulations shall be promptly delivered to the authorities of the Republic of Panama by game wardens employed by the Institute for appropriate action under the laws of the Republic of Panama.

I further consider it desirable and I therefore propose to Your Excellency that our Governments agree to designate the Institute as custodian for the Barro Colorado Nature Monument for an initial period of five years, to be extended for additional 5-year periods upon request by the Institute at least one year in advance of the date of expiration of the period, or until such time as our Governments may mutually agree on other understandings for the administration of the Nature Monument. If, subsequent to the termination of the Panama Canal Treaty, the Republic of Panama should desire to terminate the custodianship of the Institute of the Nature Monument, I consider it desirable and I therefore propose that our Governments agree that the decision take effect one year after the day on which the Republic of Panama shall inform the United States of this intent.

If the foregoing understandings proposed for custodianship of the Barro Colorado Nature Monument by STRI are acceptable to the Government of the Republic of Panama, I propose that this note and Your Excellency's affirmative response constitute an agreement between our Governments concerning this matter.

Accept, Excellency, the renewed assurances of my highest consideration.

For the Secretary of State:

ELLSWORTH BUNKER
Ellsworth Bunker
Ambassador at Large

His Excellency

RÓMULO ESCOBAR BETHANCOURT,
Chief Negotiator.

SEA-LEVEL CANAL

Mr. RIPLEY. You will recall, Mr. Chairman, that there was concern expressed by the Smithsonian back in 1965-66 about the possibility of the creation of a sea-level canal.

Mr. YATES. That's what I remember.

Mr. RIPLEY. We undertook studies which indicated that there were a number of very aggressive species in the Pacific Ocean which could hardly be prevented from entering the Atlantic where the effects of their coming might be totally misunderstood and under-estimated.

There is a poisonous snake, and these star fish are extremely destructive.

Mr. YATES. Of what? Coral reefs?

Mr. RIPLEY. Coral reefs. And, they are pandemic in parts of the Pacific, but they ebb and flow in numbers, they fluctuate in numbers, according to rhythms that are still little understood but that do place them under control in the Pacific. We have no indication that the same kind of cycle would occur in the Atlantic. And, these and a number of other invertebrates, marine invertebrates and fishes, too, might hybridize with some of our edible fishes in the Atlantic. These all present extraordinary biological problems.

Mr. YATES. Does your Pacific yellow-bellied sea snake found in the Panama Canal live on the Pacific side?

Mr. RIPLEY. Yes, it does. It bites a number of fishermen every year annually on the Pacific side and it is obviously——

Mr. YATES. Is it a freshwater snake?

Mr. RIPLEY. It's a sea snake. It is obvious that if it got into the Atlantic it could go up with the Gulf Stream and end up affecting the real estate of southern Florida quite substantially.

Mr. YATES. Isn't the Great Barrrier Reef being eaten up by starfish, now?

Mr. RUBINOFF. There was a plague of them. It looks like it is a periodic phenomenon but we have discovered that there is a variety of commensal organisms living in the Pacific which help to control the attacks of starfish. I think you see one in each of those photographs, a little crab driving them off, and a number of other species like those painted shrimp which also are predators on starfish. These commensal organisms are not present in the Atlantic Ocean.

Mr. YATES. Thank you very much, Mr. Rubinoff.

VISITORS TO THE TROPICAL RESEARCH INSTITUTE

Mr. RIPLEY. We would like to submit for the record, Mr. Chairman, if we could and with respect to the Smithsonian Tropical Research Institute, this visitor data which shows the numbers of states, universities, as well as foreign country scholars, tourists and visitors who come to the Institute, came last year, for example. It really is an extraordinary record.

Mr. YATES. What do you mean by "came." They visited for what purpose?

Mr. RIPLEY. They visited, and a number of them came for research, scientific trips. Others, of course, were making initiatory

visits to see about doing work there later on. But, you can see that there is a very broad spectrum of interest in this Institute.

Mr. YATES. The visitor data may be included in the record at this time.

[Material to be supplied follows:]

SMITHSONIAN TROPICAL RESEARCH INSTITUTE

VISITOR DATA

OCTOBER 1978 TO SEPTEMBER 1979

FY 1979

Visitor Numbers	:	1,183	(241 Research; 942 Educational)
Visitor Days	:	17,087	(15,647 Research; 1,440 Educational)
Countries	:	32	
States	:	40	Plus: D.C., Puerto Rico, U.S. Virgin Is. and
Universities	:	76	Canal Zone
Other Organizations:		62	

COUNTRIES REPRESENTED:

Argentina
 Barbados
 Belize
 Brazil
 Canada
 Chile
 Colombia
 Costa Rica
 Denmark
 Dominican Republic
 Ecuador
 England
 France
 Germany
 Guatemala
 Honduras
 Israel
 Kenya
 Malaya
 Mexico
 Netherlands
 New Zealand
 Panama
 Papua New Guinea
 Peru
 Poland
 Spain
 Sweden
 Switzerland
 Turkey
 United States of America
 Venezuela

U.S. STATES REPRESENTED

Alabama:	Wisconsin
Arizona	Wyoming
Arkansas	
California	Plus: District of
Colorado	Columbia,
Connecticut	Puerto Rico,
Delaware	US Virgin Is.
Florida	and the
Georgia	Canal Zone
Hawaii	
Idaho	
Illinois	
Iowa	
Kansas	
Kentucky	
Louisiana	
Maine	
Maryland	
Massachusetts	
Michigan	
Minnesota	
Missouri	
Nevada	
New Jersey	
New Mexico	
New York	
North Carolina	
Ohio	
Oklahoma	
Oregon	
Pennsylvania	
Rhode Island	
South Dakota	
Tennessee	
Texas	
Utah	
Virginia	
Washington	

UNIVERSITIES REPRESENTED

American University	University of Iowa
Auburn University	University of Kansas
Boston College	University of Leeds
Brigham Young University	University of Malaya
Cambridge University	University of Maryland
California State University	University of Massachusetts
Canal Zone College	University of Maine
Cornell University	University of Michigan
Dartmouth College	University of Missouri
Florida State University	University of New Mexico
George Washington University	University of North Carolina
Harvard University	University of Oklahoma
Hebrew University	University of Oregon
Hofstra University	University of Ottawa
Humboldt State University	University of Pennsylvania
John Hopkins University	University of Tennessee
Massachusetts Institute of Technology	University of Texas
McGill University	University of Washington
Michigan State University	University of Wyoming
New Mexico State University	Vanderbilt University
North Carolina State University	Virginia Technological University
Northern Illinois University	Washington University
Oregon State University	Western Kentucky University
Reed College	Yale University
Rensselaer Polytechnic Institute	
Rollins College	
Rutgers University	
Stanford University	
State University of New York	
Syracuse University	
Tennessee Technological University	
Temple University	
Texas A & M College	
Texas Lutheran College	
Tufts University	
Universidad del Valle	
Universidad de Colombia	
Universidad Nacional de Costa Rica	
Universidad Nacional de Panama	
Universidad Santa Maria la Antigua	
University of Alberta	
University of Arizona	
University of California, Berkeley	
University of California, Irvine	
University of California, San Diego	
University of California, Santa Barbara	
University of California, Santa Cruz	
University of Chicago	
University of Colorado	
University of Florida	
University of Hawaii	
University of Illinois	

OTHER ORGANIZATIONS

Organization for Tropical Studies .

U.S. Army
 U.S. Navy
 U.S. Air Force
 U.S. Congress
 U.S. Embassy
 U.S. Department of State
 U.S. Naval Research Laboratory
 Balboa High School
 Audubon Societies
 Panama Canal Company
 Panama Canal Authority
 Gorgas Memorial Laboratory
 Tropic Test Center
 Boy Scouts of America
 Girl Scouts of America
 Museo Nacional del Hombre Panameño
 Museo Nacional de Ciencias Naturales
 Missouri Botanical Garden
 Ministerio de Desarrollo Agropecuario
 Canal Zone Elementary Schools
 British Broadcasting Corp.
 RENARE
 Berlin Zoo
 Charles Darwin Research Station
 Margarita Union Church
 Federal Aviation Agency
 Gorgas Hospital
 Operation Drake
 Canal TV 11
 Manomet Bird Observatory
 U.S. Fish and Wildlife Service

Ministerio de Salud
 National Geographic Society
 Gulf Coast Research Laboratory
 Geografia Universal
 "Earthwatch"
 Guardia Nacional de Panama
 Ministerio de Relaciones Exteriores
 National Park Service
 Museo de Historia Natural de Lima
 Colegio San Vicente
 Bank of London
 Ebenezer Methodist Church
 Museo Nacional de Brazil
 Museo Nacional de Costa Rica
 Nestle Company
 Baltimore Sun
 Cutter Laboratories
 "El Guayacan" Magazine

Instituto de Enseñanza Superior
 Center for Disease Control
 INDARENA
 Jardin Botanico del Valle
 School of the Americas
 Edward Grey Institute of Field Ornithology
 Maritime Forest Research Center
 Interamerican Hydrographic Survey
 Und Museum der Universitat
 Curundu Elementary School
 Woods Hole Oceanographic Institute

RADIATION BIOLOGY LABORATORY

Mr. YATES. All right. Let's talk about radiation biology. Kind of a miniscule request. You want \$1,000 for travelling between the greenhouse provided to your laboratory and Bethesda. What kind of travel do you want for \$1,000?

Mr. CHALLINOR. This requires the operation of a van to bring plant specimens back and forth between the greenhouse in Bethesda and our laboratory in Rockville.

Mr. YATES. You want another \$50,000 to study the molecular structure of plants for such things as lettuce and tomatoes and so forth?

Mr. CHALLINOR. On page A-33 we describe——

RELATION BETWEEN RADIATION LABORATORY AND AGRICULTURAL
LABORATORY

Mr. YATES. Yes, I thought the Agricultural Laboratory at Beltsville was doing that.

Mr. CHALLINOR. Our work, I must emphasize, has been focused on the theoretical aspects of plant physiology rather than the practical aspects that Beltsville has the assignment or mission from the government to do, namely, how to improve the qualities of these particular strains of vegetables. The Smithsonian, for example, is much more concerned about why is the grass green, rather than how to make the grass grow taller or shorter, or thicker, or what not. So, this instrument, and there is a picture here, if you are curious as to what it looks like, is extremely valuable to try and understand the molecular structure of plants.

Now, this is something that we have been waiting for for a long time and, encouraged by the executive branch, we are applying now for support from the Congress.

Mr. RIPLEY. We are using these plants, Mr. Chairman, in the same way a medical laboratory might use mice or rabbits, something of this sort. Whereas the Department of Agriculture is interested in growing better strains of plants for human consumption. In other words, these are sample plants for our own biological experiments.

Mr. YATES. Here we have an explanation by the Agricultural Research organization in Beltsville as to what they propose to do. And, I read—"The science and education administration—agricultural research—historically has had great impact upon photosynthesis research. Not only is it related to agricultural but to the fundamental physiological and plant biochemical aspects of the problem. In recent years, the agency has had an increased emphasis in this research area. The program is directed at increasing plant productivity through increased photosynthetic efficiency. A concept of the basic research program falls under the definition of basic agriculture research which is considered research for fundamental knowledge that provides the background base of information that supports technological development and application in agriculture. In this context, the photosynthesis program is directed in part to enhancing or increasing the efficiency of the conversion of carbon dioxide to plant materials as is driven by sunlight. The

second, and perhaps most important activity, is research directed to increasing the efficiency of utilization of that fixed carbon in our plants, that is, changing our crop plants through either new technology or existing technology to produce those parts of the plants which result in increased quality and quantity of food and fiber."

They have a whole list of what they are doing. And, they are working on biopigment in relation to its mechanism of controlling plants utilization of life. Now, I understood Mr. Challinor to talk about biopigment. Didn't I?

Mr. RIPLEY. This suggests to me, Mr. Chairman, that we should ask the Director of the Radiation Laboratory to submit a statement to you explaining far more efficiently than we can, who are not technically involved in the problem, what the differences are.

Mr. CHALLINOR. I might add, Mr. Chairman, that Beltsville has been studying photosynthesis since well into the early 1950's, in the days of Dr. Bothwick, who was one of the great pioneers in photosynthesis. I might point out that Beltsville does not devote its energy to every single aspect of photosynthesis, it is much too broad a topic even for Beltsville. And, that we are talking relatively between the size of the budget of the Agricultural Research Service and the size of the budget of—

Mr. YATES. Yours is not as great.

Mr. CHALLINOR. We are talking about fractions of a percent, in terms of the work that we are doing. However, the kind of research that we are doing is extremely valuable to Beltsville, as well.

Mr. YATES. I would think it would be, except their explanation leads one who is not totally sophisticated in this subject to believe that they might be doing the same kind of work. For instance, subparagraph D of this statement, says: "A group of scientists are investigating how plants respond to different quality of light. Through these investigations there appears to be the potential for identifying new plant pigments which are important to a part of the photosynthetic process."

Mr. CHALLINOR. That is definitely true, and we have, indeed, at the Radiation Biology Laboratory, already have identified some of these among which are—

Mr. YATES. For them.

Mr. CHALLINOR. Phycobilisomes. But we can.

Mr. YATES. Say that again.

Mr. CHALLINOR. Phycobilisomes. That's a very small new pigment in a plant cell that we think triggers the precursor of the whole photo-synthetic process. All I am saying is that some overlap, I do not think, is bad and this is a particularly small portion of the government's investment.

Mr. YATES. You might want to take this statement by the Beltsville group and show the differences in what you are doing. You might want to place that in the record.

Mr. CHALLINOR. We would be happy to.

Mr. YATES. Thank you.

[The information follows:]

RESEARCH AT THE RADIATION BIOLOGY LABORATORY

There are basic differences in the nature of the research conducted at the Smithsonian and at Beltsville, and consequently, there is no duplication of effort.

The Smithsonian Radiation Biology Laboratory (SRBL) has a long term emphasis upon the molecular level of research and the fundamental processes involved in the growth and development of plants and other organisms regulated by light. The U.S. Department of Agriculture (USDA) is more interested in the application of this kind of fundamental knowledge to the process of photosynthesis and improved production efficiency of crop species.

For example, the SRBL is isolating, characterizing and determining the active site of the phytochrome molecule which allows it to regulate certain plant functions such as flowering. Although phytochrome was first isolated at Beltsville, no one is working at present within the Cooperative Research Program on this basic aspect. Recently, the SRBL has made some fundamental discoveries using flavin, a yellow pigment to display phytochrome at an active site. This has enabled a new isolation procedure to be developed which will allow us to obtain phytochrome from green plants for further study. This objective has not been achieved as yet by anyone. The circular dichroism spectrophotometer is requested as a tool to reveal the protein structure of the phytochrome molecule.

The SRBL is investigating plant responses to different qualities of light. However, the SRBL emphasis is upon the regulatory control of growth and development and not upon the storage of chemical potential energy in photosynthesis as USDA. For example, no one at USDA is working on blue light regulated responses. No one at USDA is measuring spectral distribution of sunlight and no one is applying this information to the growth and development of plants in controlled environment chambers that is not directed to photosynthesis. No one at USDA is monitoring ultraviolet-B or erythermal energy. These are all active programs at SRBL.

NATIONAL AIR AND SPACE MUSEUM

Mr. YATES. Let's turn now to the National Air and Space Museum. Page 34 of our justification. There is a very impressive statistic in here among all the impressive statistics—you say, on page 34: "The National Air and Space Museum has been visited by more than 35 million people since it was opened to the public on July 1, 1976." And, you have got all kinds of exhibitions there. It is a marvelous museum and I suspect that it is the most popular museum in Washington in this city of museums.

Mr. RIPLEY. I could add that it is the most popular museum in the world.

Mr. YATES. Is it? And, here you have a whole description. It's marvelous. I think I should send this to my school, this justification of yours, showing what they have here. The kinds of exhibits that they have.

Now, you also have a National Air and Space Museum building at Silver Hill. As a matter of fact, you have a fourth building there and you are opening a fifth there in 1981. Do you get a lot of people at Silver Hill?

Mr. CHALLINOR. Mr. Chairman, because of the conditions at Silver Hill, we open those on a regularly scheduled basis by appointment. These buildings are primarily for the aviation buffs. If a person is particularly interested in a particular airplane, they can call up and we can arrange visits on a regularly scheduled basis for them to come. It is not equipped to handle the large kinds of crowds that we get at the Mall, but we are talking roughly of around 14,000 to 15,000 people a year there.

Mr. YATES. Your activity is primarily basic research rather than applied research, isn't it?

Mr. CHALLINOR. Yes, very much so.

Mr. YATES. What problems do you have at Air and Space that we ought to know about? Are the numbers too much to cope with?

Mr. CHALLINOR. No. We have problems with the carpets wearing out with this many visitors and the maintenance of the building itself is presenting a larger problem than we had anticipated. When you have 7 or 8 million visitors a year coming through your doors, the wear and tear on the building is considerably more than we had initially felt it would be.

Mr. YATES. Do you have much vandalism?

Mr. CHALLINOR. Relatively little. Vandalism mostly consists of squeezing chewing gum into the carpet, but as far as breaking exhibits, there has been relatively little vandalism.

Mr. YATES. They aren't hurt by people touching or feeling them.

Mr. CHALLINOR. In fact, we encourage them to touch the moon rock and certain other exhibits that are adjusted for that very purpose.

Mr. RIPLEY. Crowded museums seem to suffer less from vandalism in proportion. It's a function of visitation.

CHESAPEAKE BAY CENTER FOR ENVIRONMENTAL STUDIES

Mr. YATES. Chesapeake Bay Center for Environmental Studies. We are over to page 42, how much did it cost to construct the dam's automated watercollecting equipment?

Mr. CHALLINOR. Between \$250,000 and \$300,000. And that was over about a four or five year period.

Mr. YATES. When did you get the money?

Mr. CHALLINOR. We started to get the money in 1972 from the NSF's RANN program. Research applied to the national needs. That went on for two or three years. NSF, then, bowed out and the Environmental Protection Agency then became interested and underwrote the cost of about five more concrete V-notch wiers, so that with the combination of both the NSF and the EPA, we were able to build a total of 15 wiers.

Mr. YATES. That's a testimonial to your ingenuity. If the Committee hasn't given you funds, you have gone elsewhere for it.

Mr. CHALLINOR. That has worked quite well in the past, but as often happens, the National Science Foundation is only willing to fund operations for just so long and they expect the people, or the organizations they have funded, to go out and get other funds to maintain them. This is the classic example of many donors. For instance people give libraries to universities and then once the university has the building it must heat it and keep it going.

Mr. YATES. Well, would you say, too, that the acquisition of the Chesapeake by the Smithsonian without the approval of Congress is another example of that kind of thing.

Mr. CHALLINOR. Touché.

RHINOCEROS HORN FROM THE NATIONAL ZOOLOGICAL PARK

Mr. YATES. Okay, let's talk about the Zoo. Dr. Reed?

Mr. RIPLEY. Dr. Reed?

Mr. YATES. He is here, I saw him earlier.

Mr. RIPLEY. He took back the rhino horn, I hope you don't mind.

Mr. YATES. No, that's okay. I suggested that you do because I must say that I was kind of shocked by the value ascribed to the rhino. What was it, something like \$10,000.

Mr. RIPLEY. Well, his rhino horn was \$78,000.

Mr. REED. But it was only 10 years of growth.

Mr. YATES. How long does a rhinoceros live?

Mr. REED. Lucy lived for 30 years.

Mr. YATES. And, the horn grows all during that period?

Mr. REED. Well, it grows all during that time, but when she was here at the Zoo she and Willie got in a scrap——

Mr. YATES. Was Willie another rhino?

Mr. REED. Yes, her husband. Her mate.

Mr. YATES. Her mate, okay.

Mr. REED. They butted horns and she lost. Her horn was loosened. The flies came in and the maggots infected the horn base; it was fly-blown, so we had to anesthetize her and saw it off. We know the date when the horn was sawn off and when she died. This horn that I brought in shows 10 years of growth. Sixteen pounds at \$300 an ounce. Bill Mann used the last of his trust funds, so I had nothing to spend when I took over. I bought the two animals for \$15,000 delivered. Now one horn 30 years later, is worth \$78,600.

VALUE OF RHINOCEROS HORN

Mr. YATES. How do you know that this is the value?

Mr. REED. We got that figure from the World Wildlife Fund which keeps track of what the local price in Singapore and Hong Kong is. They keep track of illicit prices and illicit traffic in animals and parts thereof throughout the world.

Mr. YATES. Is that good or is that bad?

Mr. REED. That is very bad.

Mr. YATES. I would think so.

Mr. REED. The rhino are being killed all over the world——

Mr. YATES. Because of the quotations put out by this organization?

Mr. REED. No, no. Because the people who are selling them know what the quotations are anyway. The quotations are from the smugglers.

Mr. RIPLEY. It is an illicit trade, of course.

Mr. REED. Dr. Ripley mentioned yesterday, the number of black rhino that have been shot out in Kenya, and the particular horn that you saw came from one of the northern white rhinos, a northern sub-species.

Mr. YATES. That was the second horn.

Mr. REED. The second horn, yes. This species is virtually extinct in the southern Sudan. It has been poached by well-organized shooting groups of the Shifta tribes. Now they are organized and using weapons; I gather they are Russian weapons they have gotten or stolen from somebody. They are even coming way down in Kenya on organized hunting raids and the poor game wardens down there are still using the Enfield rifle left over from the British going up against Russian——

Mr. RIPLEY. Kalashnikovs.

Mr. REED. Right, the combat rifle of the Russians.

Mr. YATES. Well, but are the rifles used against men or just against the animals?

Mr. REED. Both.

Mr. YATES. Is there actual shooting between the game wardens and the parties?

Mr. REED. Yes, the game wardens are getting killed. It is not an easy life to defend these vast open areas against armed aggressive poachers.

Mr. YATES. How do you know the Russians are doing this?

Mr. REED. The Russians aren't doing it, but they have supplied arms to the Somalias. And the Somalias take a light view of whether they are going out and chase the Abyssinians or chase rhinos or what they are going to do. They've done this for centuries. The Shiftas have always been a nomadic fighting tribe.

Mr. YATES. Why is there such a market for rhino horns?

Mr. REED. Because it is supposed to be, in the Orient, an aphrodisiac.

Mr. YATES. When it is ground into powder?

Mr. REED. When it is ground into powder and consumed it is supposed to produce sexual activity in man.

Mr. YATES. In humans or in rhinos?

Mr. REED. In humans. In rhinos, well, I've never read a report by any of the rhino associations what they think of it but it must have some attraction for the rhinos or they wouldn't grow it.

Mr. YATES. Have there been any scientific studies as to the efficacy of the rhino powder?

Mr. REED. I really don't know. Dr. Ripley, have you ever heard of that?

Mr. RIPLEY. I have urged that this be done in order to combat this myth, but there is another danger to the rhinoceros, now, which the World Wildlife Fund has discovered and that is that, in the Arabian Peninsula, particularly in Yemen, there are people who create a handled dagger, which men wear in the center of their belts, among the Arab people. This is a dagger with sort of a curved blade and a rather wide, tall handle.

Instead of making these with metal wire bound around them sometimes the very elaborate ones have gold wire and so on, they are now using rhino horn. The symbolism of this is perhaps obvious because the dagger is worn in the center of the belt in a prominent position and the handle projects upwards into the chest of the wearer. The fact that it is rhino horn apparently produces a kind of macho effect, and makes a man feel virile and powerful.

Mr. YATES. How does the spectator know that it is rhino horn—or is this purely subjective?

Mr. RIPLEY. This is subjective and, of course, is fashionable. It has been a fashionable object of attire in Yemen, where the fabrication goes on.

Mr. YATES. North Yemen or South Yemen or both Yemens?

Mr. RIPLEY. I think it is just Yemen.

Mr. YATES. Isn't there a North and South Yemen?

Mr. RIPLEY. Yes, Mr. Chairman, I understand there are two republics, but I think it is prevalent among craftsmen throughout Yemen, as a totality, where there is a very old tradition of silver-work, using wire and inset stones. It is a place where all over

Arabia people went to trade for the craftsmen's work from Yemen. I think it goes on in both North Yemen and in South Yemen.

In any case, these dagger handles are becoming very fashionable. All you have to do is have a fashion for dagger handles made out of rhinoceros horn the same way that you used to have ladies wearing leopard-skin coats and so on to create another drain on the available resource, which can only be acquired by poachers shooting the animals.

Mr. YATES. Are the poachers still going after the elephants for their tusks?

Mr. RIPLEY. Oh yes.

GROUND CLEANLINESS AT THE ZOO

Mr. YATES. What problems do you have at the Zoo that we ought to know about. I sent you a letter which I assume related to one of your problems and that was a question of ground cleanliness.

One of the visitors—I think she was from Cincinnati and how she happened to write to me I don't know—she wrote to me complaining about the fact that she and her children were visiting the Zoo and they thought the Zoo was marvelous except they thought the grounds could be cleaner.

I know you have got a construction project that is constantly causing you some difficulty in this respect, but how do you deal with this problem? Are you dealing with it?

Mr. REED. Dealing with the problem of the grounds being cleaned? Yes, it is a constant problem. It has been a problem ever since the Zoo has been founded. The necessity of having staff to pick the trash up and remove it is—this particular person that wrote you unfortunately did not give you specifics of when—what time of day—she was in.

The day that she was there, we did have a break down. There were two or three people absent, and the man in charge that day did not respond to the problem as quickly as he should so the grounds were dirtier than they should have been. However, had she been there at 4 p.m. on a very busy Sunday, the grounds do get looking a little messy about the latter part of the day.

Mr. YATES. How many visitors would you say you have on an average summer Sunday?

Mr. REED. Well, it will vary according to whether—on a real good day, we will have up to 20,000 or 25,000.

Mr. YATES. You have that many.

Mr. REED. It seems like more.

Mr. YATES. They don't drop their food and their wrappings—their food wrappings—into all these containers that you have around the place?

Mr. REED. Unfortunately they don't. I think I have noticed in the past few years there has been more awareness by the public about keeping their parks clean, but certainly insufficient.

The problem is, as I am sure you are aware, when the first piece of trash goes on the ground, it encourages the second piece and then it starts snowballing. It is very important that that first piece does not get on the ground.

It is a constant problem that we have, I think, in every park in the world.

THE PANDA BEARS

Mr. YATES. Okay, tell us about your pandas. How are they getting along?

Mr. REED. Well, our pandas are getting along fine. They are living a good life and enjoying their public. People like to come see them. They are doing everything except breeding.

Mr. YATES. Why don't you try some of the rhino horn?

Mr. REED. Well, belonging to such a fine, wonderful, scientific, exact organization that I do, I would not want to admit that I would be participating in myths by passing out rhino horns. We really don't believe it would work.

Mr. YATES. What do you think will?

Mr. REED. Well, we are prepared, if he does not breed her to try artificial insemination.

Mr. YATES. Or can it be that she is not as attractive as she should be? Can you exchange her with the Chinese?

Mr. REED. Hardly. It is very difficult—they protect them very well. Actually, it is not her fault. She is a most willing—.

Mr. YATES. Seductive?

Mr. REED. Seductive, passionate, cooperative—she's just everything that a good girl should be and he is the most stupid male that I have ever met. It would actually make you cry to see this bumbling idiotic thing he goes through. We have a scientific movie made by the scientists out there—30 minutes of absolutely no action. It is narrated by a fine young woman scientist. It is narrated deadpan, absolutely scientific language, exactly what is going on. He is making a mounting attempt—failed. He makes a second mounting attempt—3½ seconds—failed. And it goes on and on.

We showed this to the scientific group, and everybody is deadpan. This is the most serious scientific behavioral observation except for the silly director. He is sitting back laughing his head off. It was like a Keystone Cop comedy.

I mean of all the fury—the activity—nothing happens.

We are going to try artificial insemination next time—we are ready.

I spent time with the Chinese in Peking—they had done it twice that we know of. I got all the details and pictures and all that stuff, which is really fun when you have got a translator from the more technical—from the diplomatic side. And you get a couple of old horse doctors talking about the intimate details of the sex life of a giant panda and how you are going to breed him. That gets—you certainly shook him up because you weren't supposed to talk this earthy language.

Mr. YATES. You have corresponded with the Chinese on this. Do they have techniques that the male doesn't have?

Mr. REED. No, they do not. They had done a lot of artificial insemination in swine. They are very far advanced in swine insemination.

Mr. YATES. Does this make the panda an endangered species?

Mr. REED. The panda—it is listed as an endangered species—but we don't know enough about them in the wild.

Mr. YATES. Where are they in the wild?

Mr. RIPLEY. Szechuan province.

Mr. YATES. Far west.

Mr. REED. Yes, very far west. There is an area about 125 miles eastwest and 300 miles northsouth in their range. The Chinese are giving various figures, sometimes as high as 4,000 animals. In the Wanglang Reserve, which is their principal reserve in the upper part of Szechuan, they estimated that there are 200 animals. The giant panda is so keyed in with living off bamboo that when it flowers and then dies after flowering, as it did in 1976, because it is a grass. The Chinese stated that they lost about half the animals in the reserve. About 100 animals died of starvation because the bamboo died. They stated it will take about 15 years for the bamboo to come back.

In fact, I think that Dr. Soderstrom, of our Smithsonian staff, knows as much about bamboo as anybody in the world.

Mr. RIPLEY. One of our botanists, Dr. Soderstrom, is the world authority on bamboo. This is a fascinating problem that a particular species of bamboo will reach a flowering stage and start to die off, after flowering in any latitude in the world. That species will die off simultaneously—whether it has been introduced into the United States, whether it is wild in India or West Ghana, or whether it is in Australia, Europe, anywhere. It then produces a kind of climactic stage for the food of an animal which might be bamboo dependent, such as the giant panda. Where suddenly the die off occurs the panda is not able to adjust to other food and is in trouble unless it can find some other occasional species of bamboo in the same habitat which are not flowering.

EVERGLADES' KITE

Mr. YATES. But in your field—I have visited the Loxahatchie Wildlife Refuge a couple years ago and Everglades' kite was dying out because it couldn't find a particular kind of a snail.

Mr. RIPLEY. Snail.

Mr. YATES. That's right. They now have more Everglades, kites because they were able to introduce some of those snails into the swamps.

Mr. RIPLEY. You can see—you can see the birds right now.

REPRODUCTION OF CRANES

Mr. YATES. Yes. And also didn't I read recently or hear on television—was it the flamingoes or the whooping cranes—where the male had forgotten how he was supposed to seduce the female. Some Japanese keeper who is knowledgeable in how the male is supposed to act was trying to train him to do it again so that the species would not die out.

Mr. RIPLEY. There is a crane foundation whose headquarters are in Wisconsin in this country. Dr. Archibald, the head of that foundation, stimulates one crane to get into a breeding condition by dancing with it himself. This has been very effective. You put two cranes into adjacent pens so they can see each other, but if—as they are rather old and quarrelsome—they were put together they might fight. They have been solitary in the zoo—they may have been relics from the zoos where they have been solitary for many

years. Forty-year-old cranes—he gets them dancing by going in and dancing with them—and then quickly his assistant behind him reaches in with his little test tube and takes a sample of the semen and rushes to the other pen and places it in the cloaca of the female. That is the way they get their eggs.

Mr. YATES. They are no longer endangered then?

Mr. RIPLEY. Well, it's helping—it does help.

Mr. YATES. Well, how healthy is Doctor Archibald? How long does he last?

Mr. RIPLEY. He's still fairly young. He has a good many more years on him.

Mr. YATES. He's younger than the cranes, then?

Mr. RIPLEY. He is much younger than the cranes.

We are doing some here under his tutelage—we are working with Dr. Archibald.

INFLATION AT THE ZOO

Mr. YATES. What problems are you having, Mr. Reed—are you having any?

Mr. REED. None that time and money wouldn't cure.

Mr. YATES. Ah, well, how much time and how much money do you want?

Mr. REED. Well, we need a great deal more time and much more money. We need to continue with our construction program as we will probably discuss a little bit later. We are coming along with our program.

The amount we are requesting in this year's S&E budget is certainly minimal—it is just barely keeping up with inflation.

Mr. YATES. That's true of all of us.

Mr. REED. I am afraid we are not particularly unique in that sense.

Mr. YATES. No, all of us are having problems keeping up with inflation.

Mr. REED. But of course, we are more important.

Mr. YATES. Touché, as Mr. Challinor would say.

FRIENDS OF THE NATIONAL ZOO

How much do you expect to get from FONZ—from the FONZ in 1981?

Mr. REED. In calendar year 1979, the Zoo received approximately \$400,000 in support from the FONZ, and it will probably go up to about \$460,000 in 1981. In direct support of our symposia and research programs we received about \$152,000 in calendar year 1979. In the educational programs of the FONZ for calendar year 1979—of their services including their volunteer services—we received about \$245,000 in dollar value; a lot of that is in volunteer time.

AQUARIUMS IN THE UNITED STATES

Mr. YATES. Well, you don't have anything to do with the aquarium, do you?

Mr. REED. We do not have anything to do with the aquarium. However, in the next construction that we will be asking for a few years from now on the aquatic mammal house, there will be some fish exhibits in there along with the manatee and other penguins.

Mr. YATES. I notice from the paper that Baltimore wants to be the site of a national aquarium. How can you have a national aquarium in Baltimore? It's not yet the nation's capital, is it?

Mr. REED. Not according to my knowledge. I understand that they already have the title of the national aquarium.

Mr. YATES. How did they get it?

Mr. REED. Well, I hope that it was given by the——

Mr. RIPLEY. It was given by the Congress.

Mr. REED. By the Congress.

Mr. YATES. When did we pass that legislation? Last year?

Mr. REED. Last year.

Mr. YATES. Designating the Baltimore aquarium as a national aquarium?

Mr. REED. That's right.

Mr. YATES. A national aquarium. Well, that's different. The national aquarium should be in Washington, shouldn't it? We have one in the basement of the Commerce Building, haven't we? Too bad that Mr. Kirwin didn't live a few years longer, or isn't it?

Mr. RIPLEY. Yes it is.

Mr. YATES. For many reasons. On the question of the aquarium, you don't have any space at your Zoo for an aquarium anyway, do you?

Mr. REED. We will be building in the aquatic mammal building, which we will be discussing—planning now—I will show you the plans later. We will have aquarium space, but we will not go into the large dolphins, the big shark tanks and other sea tanks that the major aquariums and marinelands have. We will have a nice selection of fish and marine and fresh water invertebrates.

Mr. YATES. Yes, but nothing is as spectacular as the big tanks and the dolphins and others swimming around there, is there?

Mr. REED. There is nothing as spectacular.

Mr. YATES. As, for example, the aquarium in Chicago.

Mr. REED. Yes, the Shedd Aquarium has a very, very beautiful exhibit.

Mr. YATES. As you walk in there, they have this huge tank filled with sharks swimming around. Maybe we can call that the national aquarium.

Mr. REED. What is that?

Mr. YATES. Maybe we can call the Shedd Aquarium the national aquarium. Of course, that will be over your opposition?

Mr. REED. No, not necessarily.

Mr. POWERS. A national aquarium.

Mr. REED. Yes, a national aquarium.

Mr. YATES. Okay, I will accept the amendment.

Mr. REED. There was a lot of discussion when this was brought up about Baltimore trying to get the title of the national aquarium as to why Shedd, the Steinhart, the New York, the New England Aquarium—these are all public aquaria, very good, very reputable, already built—why they should not receive——

Mr. YATES. Similar titles.

Mr. REED. Similar titles or if there were going to be support. The problem that has been voiced by some of our colleagues is that once they get the title, they will have financial difficulty and they will expect Congress to support them. And if they are going to support an aquarium in Baltimore, why not Shedd? Certainly Shedd has done a good deal of scientific—good exhibition work—fine breeding—it's really one of the best aquaria.

Mr. YATES. Most aquaria are being supported in measure under the Institute for Museum Services.

Mr. RIPLEY. Yes, that is true. Most aquaria are included in that. It's a great shame that the national aquarium was not built in Washington. The Charles Eames design was the most versatile and stylish one that I have ever seen, and I am only sorry that at that particular moment when it could have been afforded—it was not very expensive—it wasn't pushed ahead.

JOSEPH HENRY PAPERS

Mr. YATES. Thank you Mr. Reed. Now we turn for one brief second to the Joseph Henry papers. You want another \$26,000 for that one. When are you going to finish that?

Mr. BLITZER. It will be another 10 or 15 years, Mr. Chairman.

Mr. YATES. Well, you want \$26,000 a year for the next 10 or 15 years. Can you finish it with \$260,000?

Mr. BLITZER. Leaving out inflation, I think the present status with the small increase would not only continue the one-volume a year rate but probably accelerate it a bit.

RARE MUSICAL INSTRUMENTS AT THE MUSEUM OF HISTORY AND TECHNOLOGY

Mr. YATES. And you also want some money for your National Museum of History and Technology. And you want \$18,000 for some professional musicians to give a performance on rarely played instruments.

Mr. BLITZER. I will let Mr. Kennedy, since he is here——

Mr. YATES. What is an example of a rarely played instrument?

Mr. KENNEDY. An 18th century violin that you have to be careful of. Or a——

Mr. YATES. Some kind of a zither?

Mr. KENNEDY. Well, those instruments that are being played under that program are those that need great care—that you don't generally take out of the place—you keep them in the place, play them very infrequently for recording purposes or for demonstration purposes. That is not a general public performance budget. That is a budget for the demonstration of instruments that are precious and should be infrequently played.

Mr. YATES. Perhaps I didn't understand this as I read it. You say the sum of \$18,000 is proposed to retain professional musicians, skilled in the specialized techniques required by these early instruments. You talk about violins. What special technique do they need to play an early violin? Is it different than the usual violin?

Mr. KENNEDY. Yes. Early string instruments—both the kind that you pluck and the kind that you put a bow across—are special.

Both the nature of the bows and strings themselves are special. And the resonating box is different. These are——

Mr. YATES. Is this pre-Stradivarius—or what?

Mr. KENNEDY. Oh, yes, we have or may soon acquire products of the great grandparents of the two family Stradivarius and Guarneri. They were made by violin-makers as well and they learned their skills in the traditional patterns of apprenticeship. The earlier models were the survival of a kind of process of natural selection of violins as in other things. And they survived a lot of other instruments, some of which we also possess and which are not now found in contemporary orchestras. So what we have here are very fine instruments that are very delicate and extremely rare, the sound of which is really different to a lay person's ear.

Mr. YATES. How in the world do these musicians learn to play them?

Mr. KENNEDY. Some of them put in a lifetime, not just playing these things but learning how to play these specialized instruments. It takes a kind of training in both the musicology of and the technique of this kind of instrumentation. You want to know not only how to play it but why to play it—what is the kind of music that is appropriate for these sounds.

PLAYING RARE MUSICAL INSTRUMENTS

Mr. YATES. What is, for example?

Mr. KENNEDY. Well——

Mr. YATES. Who wrote for such instruments?

Mr. KENNEDY. All the Italian masters of that time, certainly. The Smithsonian itself——

Mr. YATES. Is this pre-Vivaldi?

Mr. KENNEDY. This is pre-Vivaldi by half a generation, yes. The Recording Program, about which I am not an expert—I know has recorded, however, the sounds of both things we very seldom hear because they were designed for these instruments and things we do hear often, like conventional Concerti Grossi of Handel or Corelli, played on the instruments for which they were really designed. The sounds are different——

Mr. YATES. Are they?

Mr. KENNEDY. Emotively as well as in skill—or technique.

Mr. RIPLEY. The concerts——

Mr. YATES. I am glad you didn't come with a musician for the show-and-tell portion—with one of those——

Mr. RIPLEY. The concert violinist who plays, let us say a Stradivarius or Amati instrument today, has had to have the neck of the instrument entirely readjusted to make a bolder, more concert-like sound because playing in Carnegie Hall or something of that sort requires a total framework within which the sound is projected so that it is made very bold——

Mr. YATES. You mean they have to adjust a Stradivarius?

Mr. RIPLEY. Yes, indeed, they change the stringing, of course—they don't use the cat gut strings anymore. They also change the shape of the neck so that it is much more bowed down and they get a much greater tension on the strings. And they play that with a——

Mr. YATES. Who in the world does that for them—a violin-maker?

Mr. KENNEDY. Yes, it isn't the maker necessarily, although the maker may tend to be the person. The record before you of the Brandenburg Concerti is played on the appropriate early instruments, although Mr. Euell could correct me if I'm incorrect about that. The thing is we are beginning to use some of the acquisitions that we made subsequent to that recording—a variety of instruments.

Mr. YATES. This says it is performed and recorded on original instruments for the first time by Aston Magna with Japp Schroder and Stanley Ritchie, violin; Fortunato Arico and John Hsu, cello—Hsu is spelled H S U—cello and viola da gamba. And you have Friedemann Immer, trumpet; Bernard Krainis, recorder; Michel Piguet, oboe; and John Solum, transverse flute.

Now are all those ancient instruments?

Mr. KENNEDY. Yes, they are.

Mr. YATES. Judging by these pictures, that's a strange trombone there. Oh, that's called a trumpet.

Well, tell me, the Smithsonian possesses a Stradivarius——

Mr. KENNEDY. No—but we have two on loan and high hopes.

Mr. YATES. Instruments—and Guarnerius—and do you permit the necks to be reshaped?

Mr. KENNEDY. If that is the way in which to make them sound as they were intended to sound, yes. It isn't a matter of damaging or altering—it is a matter of restoring them to their original playing position.

Mr. YATES. Do you ever make them available for performers like Isaac Stern?

Mr. KENNEDY. Yes.

Mr. RIPLEY. We do, except that they wouldn't play them in a concert because the shape is one that they are not used to.

Mr. YATES. That's the reason I asked the question. If you make it available for Mr. Stern, for example, and he says I have to have an adjustment of the neck because I want to play it at Carnegie Hall——

Mr. KENNEDY. No, he doesn't. He plays this instrument as is.

INTRODUCTION OF CONGRESSMAN MINETA

Mr. YATES. Oh, come on up here Norman. We are glad to have another Regent walk in. Bring your bodyguard with you.

Can't you see them trembling with fear?

Let the record show that we are graced this morning by another Smithsonian Regent, Congressman Mineta of California. We are delighted to have you here. If you want to sit here and say nothing, that's your pleasure, fine. If not, if you want to say something, if you are moved to say something, we will be very glad to have you say something.

We are now in the process—at least I am in the process of learning Smithsonian holdings, which is something the Regents are never told about.

The only ones who know this are the actual staff members, the outstanding heads of the various staffs of the institution and Mr. Ripley. He keeps all this information from the Regents. You will never learn about it—unless you happen to read this record.

PURCHASE OF 18TH-CENTURY ITALIAN STRING QUARTET

Mr. BLITZER. Mr. Chairman, could I just have a word about musical instruments. One of the acquisitions that was made by the MHT under the Regents' Acquisition Program last year was an 18th-century Italian string quartet. The Museum purchased three of the instruments and the owner donated the fourth one. This was extraordinary because they had never been altered at all. The instruments were as they were built in the 18th century.

Mr. RIPLEY. And we played some of them, Mr. Chairman, for a regents meeting. The evening before the regents meeting, they assembled for dinner and we played some of these string instruments.

Mr. YATES. Were the Regents duly appreciative?

Mr. RIPLEY. Yes, they loved it. They were very nice about it.

Mr. YATES. You mean they listened?

Mr. RIPLEY. Yes.

Mr. YATES. How many of these instruments do you have? What is a rare instrument? It's, of course, the list that I read into the record a moment ago. Are there others or is that all that are here?

Mr. KENNEDY. Oh, no, there are the quartet of Italian stringed instruments from about 1740 to which Mr. Blitzer referred—they are just the latest. But we have a very large stringed, plucked or bonked string collection—that is, what we call keyboard instruments where the string gets bonked or plucked—harpsichords, pianos, etc. That is one set of stringed instruments.

Mr. YATES. Is the word bonked a technical one?

Mr. KENNEDY. Yes, I made it up for this occasion.

TOTAL NUMBER OF RARE INSTRUMENTS

I am instructed that the total is about 2,000, Mr. Chairman.

Mr. YATES. Rare instruments?

Mr. KENNEDY. Of musical instruments—as to the rarity we would like to submit an appendix, if we may, or a submission to you as to the degree of rarity. There are—I can only say of my own knowledge that several hundred of these distinctly qualify as rare. We have aspirations this year to be able to come to you next year with some relevant additions in the areas that we have been discussing this morning—that is, those things which have contributed to the musical tradition of the west, which produced a different sound when played in the original music, which can nourish our understanding of why that music took the form it did. Our knowledge is not complete because the sounds have not been heard by contemporary ears and they will help us know why composers wrote the way they did. It will also help future composers to write a bit differently.

[The information follows:]

MUSICAL INSTRUMENTS

Among approximately 2,000 musical instruments in the Division of Musical Instruments, the following rare and important examples are restored to playing condition and used in public demonstrations four times weekly and in public concerts in the Hall of Musical Instruments, National Museum of History and Technology. Most of these are of such rarity that they can be heard only in this museum and in two or three other museums in the world:

Flemish harpsichord, 1745.

Flemish virginal (small harpsichord), 1620.

Italian virginal (small harpsichord), 1617.

English harpsichord, 1745.

French harpsichord, 1760.

English spinet (small harpsichord), 1703-10.

Two Italian harpsichords of the late 17th century.

American Steinway piano of 1892.

American Chamber pipe organ, Washington 1811-13.

English Chamber pipe organ, 1761.

American Chickering piano, 1850.

American melodeon, 1864.

German piano of 1795.

English piano of 1794.

American Chamber pipe organ, 1815.

English bass viol, 1718.

A string quartet of matched instruments of the 18th century.

Italian violin of the 17th century and another of the 18th century.

German violin, 17th century.

German viola, 18th century.

German timpani, 18th century.

French violin, 18th century.

German viola, 18th century.

English violin, 18th century.

German flute, 18th century.

German natural trumpet, 18th century.

German viola d'amore, early 18th century.

French guitar, 18th century.

English guitar, 18th century.

American guitar, 19th century.

Group of early instruments that illustrate the development from primitive instruments to the modern violin.

Group of brass instruments of the American Civil War period.

German natural horn, early 19th century.

Orchestral instruments of the 18th century (including some of the above) used in concerts by the Smithsonian chamber Orchestra in the Hall of Musical Instruments, National Museum of History and Technology.

Group of American folk instruments including Appalachian dulcimers, hammered dulcimers, banjos.

The following instruments are among those not yet restored to playing condition but of sufficient importance that it is hoped this may be done in the near future:

German clavichord, 18th century.

French piano, 19th century.

Austrian (Salzburg) piano, 18th century.

Austrian (Vienna) piano, 19th century.

French harp, 19th century.

French harpsichord, 18th century.

Flemish harpsichord, 17th century.

Steinway grand piano 1857 (an early example).

Scottish bagpipe, 19th century.

French bagpipe, 18th century.

Two American bass viols, early 19th century.

American folk cello, late 18th century.

American folk (experimental) violin, 19th century.

Small American pipe organ. 1876.

In addition, the Division has on loan a superb collection of violins by such makers from the Stradivari, Amati, Guarneri families and bows made by Tourte, Dodd, Lamy and Bultitude.

The above list represents only a portion of the collection. All instruments, whether on public exhibition or in storage, restored or unrestored, are available by appointment to students, educators, performers, collectors, builders and researchers.

Already one of the most important collections of European and American musical instruments in the world, a visit to it is essential for anyone working in this field. We hope to fill certain gaps as suitable instruments are offered on the market or as donations and to continue the restoration program.

AGES OF RARE INSTRUMENTS

Mr. YATES. What are the ages of these, Roger? How far back do you go? I keep thinking of the time of the crusades when you had the troubadors—when you had them carrying their lutes and various instruments. Are these more ancient than those?

Mr. KENNEDY. I do not know whether we have any actual instruments that go back before the 14th and 15th centuries when the explosion of instrumentation in Italy occurred.

Mr. RIPLEY. We have a lap organ, which I think is 15th century, I am not sure.

Mr. KENNEDY. As to the survival of what we would think of as of the classic period I simply know nothing. I would like to submit to you something about that.

Mr. YATES. Well, you should go back further, shouldn't you? I mean the Smithsonian being what it is—or some museum must have the instruments.

Mr. KENNEDY. Well, I—.

Mr. YATES. I remember—wasn't Richard the Lionheart freed as a result of his troubador who sang outside?

Mr. RIPLEY. Right, he sang and kept him happy on a small stringed lyre. We have—.

Mr. YATES. I thought it was a lute.

Mr. RIPLEY. I think it was a pre-lute.

Mr. YATES. It was a pre-lute?

Mr. BLITZER. I was just noticing on this recording also there is a note—

Mr. YATES. That is much later.

Mr. BLITZER. But it has a piano, a melodean and violin, cello and guitar "on instruments that are authentic to the era."

Mr. KENNEDY. That really is an important point—we are not justing talking about ancientness but authenticity at any period. It is true that even the 19th-century instruments, which were played by the precursors of people like Pete Seeger, such as the Hutchinsons, sounded differently than the contemporary guitar and other instruments that we now use for the same purposes.

Mr. BLITZER. If we have really ancient, in your sense of the word, instruments, they would probably be in the ethnographic collections.

Mr. RIPLEY. They are in anthropology—things like little harps that you play by tension and those African musical instruments—gongs and things of that sort also. The origin of the stringed instruments goes back to a collection given to us in the thirties—the Wurlitzer collection. The Wurlitzer family company gave the Smithsonian this remarkable collection of early stringed instruments, most of which were piano-like, so that the violines—

EXHIBIT SPACE

Mr. YATES. Where do you see all these? Do you see all these in your shop or are they all stored?

Mr. KENNEDY. No they are not all stored. More of them are stored than we would like.

Mr. YATES. Because you don't have adequate space?

Mr. KENNEDY. Yes, sir, but that is always the case in museums—you always—.

Mr. YATES. I gave your clue, do you need more space?

Mr. KENNEDY. We can always use more space, Mr. Chairman.

Mr. YATES. I am told the Museum has a lot of support space, but that's not show space, is it?

Mr. KENNEDY. Not in our case.

Mr. MINETA. Well, Mr. Chairman, doesn't that relieve some of the exhibit space that is on the Mall now by having them removed to the support facility, it relieves the facilities down on the Mall where they are stored, routing them out and enabling more of the space to be utilized.

Mr. YATES. I remember the last time that I visited—which museum has the archeological exhibits?

Mr. RIPLEY. Natural History.

Mr. YATES. Where would Dr. Van Beek be?

Mr. RIPLEY. Natural History.

Mr. YATES. I remember seeing the corridors jammed with cases and various other things with various shards that had been picked up. This will relieve that?

Mr. RIPLEY. Yes.

Mr. YATES. But I would trust that you wouldn't put exhibits in the corridors, too, would you?

Mr. KENNEDY. No, there are some actual exhibit halls now that are occupied with storage.

MUSICAL PERFORMANCES AT THE MUSEUM OF HISTORY AND
TECHNOLOGY

Mr. YATES. Alright, you're hiring these musicians to play these instruments, but whom will they play these instruments for?

Mr. KENNEDY. They play for the public in demonstration at regular hours. They also play for recording purposes. Primarily, this budget is for demonstration purposes on the instruments in the Museum itself, as distinguished from another program, which is the performing arts part of it, which is not in the Museum itself.

Mr. YATES. Will they be full-time or part-time?

Mr. KENNEDY. They are part-time generally.

Mr. YATES. Generally?

Mr. KENNEDY. We do not have any full-time people. These are pick-up bands, Mr. Chairman.

Mr. YATES. And are you going to charge for the performances?

Mr. KENNEDY. We have not, sir.

Mr. YATES. And you don't intend to.

Mr. KENNEDY. Not for these purposes, sir.

Mr. YATES. Will copies of these recordings be made part of the various recordings that you have for sale to the public? You are going to make recordings of them?

Mr. KENNEDY. When they are recorded, they have two purposes. One is the scholarly purpose and the other is the public purpose. And in the latter case, yes.

Mr. YATES. Do people ever come to hear these people?

Mr. KENNEDY. Yes, sir.

Mr. YATES. You say these fundings are derived from a variety of sources, including the Museum's share of sales. And expenditures under the Collections and Acquisitions Program of 1979 support the acquisition of the 18th century Lawrence Witten quartet of Italian stringed instruments? You paid \$100,000 for those. Under the Education Program audiovisual equipment for the Museum's education program cost \$32,000. So you got the instruments from other funds than appropriated funds, but now you want appropriated funds to permit them to be played, right?

Mr. KENNEDY. Yes, they and others.

MUSEUM OF HISTORY AND TECHNOLOGY RESTRICTED FUNDS

Mr. YATES. Restricted funds. Generally the restricted funds support particular exhibits. Funding for the past few years culminated from the maritime community for the cost of the Hall of Maritime Enterprise. It culminated with the show's completion in 1979. Do you want to take over the tall ships that are in New York? Is that part of your Hall of American Maritime Enterprises?

Mr. KENNEDY. No, sir.

Mr. YATES. It is not?

Mr. KENNEDY. No.

Mr. YATES. And you don't care to expand into that area?

Mr. KENNEDY. Not into real live ships, no.

Mr. YATES. Finally, a grant from Doubleday. Oh, you got a grant from the Federal Republic of Germany. What was that for?

Mr. KENNEDY. That went toward the clockwork universe show, which starts early next year. The government of West Germany's contribution actually went to the preparation of that show, which we are jointly producing with the Bavarian State Museum in Munich. They paid for that end of it, as we received both corporate funding and German governmental funding, and provincial German funding for that show.

J. EDGAR HOOVER BUILDING

Mr. YATES. There is a clipping from Periscope, which is in Newsweek of February, saying that FBI Director William Webster wants to humanize the forbidding exterior of the five-year-old J. Edgar Hoover Building. He plans showcases on the walls along the sidewalk to be filled with historical displays prepared by the Smithsonian Institution.

You have quite an arrangement with the FBI, don't you? Didn't the Smithsonian provide the furniture for the ABSCAM?

Mr. RIPLEY. No, sir.

Mr. YATES. I read that in the newspaper, didn't I?

Mr. RIPLEY. Well, you read a lot of things in the papers.

Mr. YATES. That is true. But you didn't provide that?

Mr. RIPLEY. No.

Mr. YATES. Mr. Webster hasn't called you?

Mr. RIPLEY. Mr. Webster is a delightful person, I am sure, but this is news to me.

Mr. YATES. He hasn't called you on this yet. I have seen one suggestion, and that was to build a ten-story wall in front of it.

Mr. RIPLEY. I think that has possibilities. Now Mr. Jameson——

Mr. YATES. Oh, you have closer relationship with the FBI?

Mr. JAMESON. No, sir. The Pennsylvania Avenue Development Commission talked to us a few weeks ago about the possibility, as they get into the development of the Avenue, that there might be some possibility for the Smithsonian to provide something up there, appropriate to go on display. But to the best of my knowledge it has not advanced much beyond that point.

Mr. YATES. Mr. Perrot.

Mr. PERROT. Mr. Chairman, some months ago there were several conversations between the FBI and SITES concerning the possibility of our showing smaller exhibitions in the galleries that would be opened on Pennsylvania Avenue in those areas that are now closed off. After discussing these possibilities it was found that this was not the appropriate space.

There were further discussions about having some exhibitions upstairs in the open plaza, but I believe that we indicated that the complexities of having exhibitions in such spaces would preclude the advisability of pursuing the matter.

Mr. YATES. Maybe Mr. Webster is thinking of showing the old instruments with the old Thompson machine guns.

Mr. PERROT. I was not involved in the discussions.

NATIONAL COLLECTION OF FINE ARTS

Mr. YATES. All right. National Collection of Fine Arts. You are speaking for Josh Taylor.

Mr. BLITZER. I will do my best.

Mr. YATES. He usually speaks for himself, doesn't he? You want \$32,000 for a senior curator. And you want \$149,000 in the Department of 18th and 19th Century Painting. How much of that money goes to the new senior curator, and how much is associated with the 18th century work?

Mr. BLITZER. Well, the \$149,000 is the present base for the Department. We are asking for a total increase of \$75,000, of which the \$32,000 is a part. What we are asking is \$32,000 for the senior curator, and \$16,000 for two fellows to come and work at the NCFA, and \$27,000 for a series of visiting scholars.

TARIFF COMMISSION BUILDING

Mr. YATES. I must say that the Smithsonian collections are impressive. You now talk about the NCFA's collection of over 24,000 works, which represents all aspects of over 200 years of American art. NCFA is housed in a very handsome building, but its storage space is very crowded. Mr. Perrot, will you be having space for the NCFA over at the Suitland Center?

Mr. PERROT. Mr. Chairman, it is expected that some of the surplus items of the National Collection of Fine Arts as well as the National Portrait Art Gallery may go in the building across the street, the Tariff Commission building, until such time——

Mr. YATES. I see. Rather than in the Suitland Building?

Mr. PERROT. That is the projected plan.

Mr. RIPLEY. We have always wanted to get into that building, which as you know is partly connected, under the street, and has the same architectural history, a similar architectural history.

Mr. YATES. Yes. This is outside—so you can't get it from the Pennsylvania Avenue Development Corporation.

Mr. RIPLEY. Not until GSA finds space for the International Trade Commission.

Mr. BLITZER. If I might clarify something that Mr. Peyton said yesterday about the cost of the Smithsonian using that building, I think he gave a figure of \$20 million, but said that the GSA is about to undertake a program of general modernization, new roofs, heating, ventilating and air conditioning and so forth. Our guess is that when the GSA is done with what it is going to do for the Tariff Commission in any case that the additional expense to the Smithsonian would be more on the order of \$15 million at the most.

VINCENT MELZAC ACQUISITION

Mr. YATES. Let's talk about the Melzac deal for a moment. That was added to the NCFA's collection of over 24,000 works. I take it these are all American artists, aren't they? They are abstract expressionists who were all American artists, right?

Mr. BLITZER. Correct.

Mr. YATES. How did you happen to make the deal? Who made the deal? You paid a million dollars for what, 26 abstract pictures?

Mr. BLITZER. I have a list if I can find it. I remember the general outline. I was trying to get the actual list of the paintings. Here it is. It was a gift from Mr. Melzac of 16 paintings and a purchase by the NCFA of 10 paintings.

Mr. YATES. But it was all part of the same transaction, wasn't it?

Mr. BLITZER. Yes. I can give you——

Mr. YATES. All right. I think we ought to have that list for the record.

[The information follows:]

NATIONAL COLLECTION OF FINE ARTS
ACQUISITION FROM VINCENT MELZAC

Following is a list of the paintings acquired by the National Collection of Fine Arts from the Vincent Melzac Collection.

Ten paintings were purchased at a total price of \$1, 029, 000. They are:

<u>Artist</u>	<u>Title</u>
Franz Kline	1. <u>Untitled</u> 1961 oil on canvas 72 1/2 x 100 1/8 inches
Willem de Kooning	2. <u>Untitled</u> 1950 enamel on paper 21 1/2 x 29 1/2 inches
	3. <u>Woman</u> No date pastel on paper fused to canvas 22 1/2 x 17 1/2 inches
Morris Louis	4. <u>Untitled</u> 1956 acrylic on canvas 76 1/2 x 106 1/2 inches
	5. <u>Faces</u> 1959 acrylic on canvas 91 x 136 inches
	6. <u>Beta Upsilon</u> 1960 acrylic on canvas 102 1/2 x 243 inches
	7. <u>Aurora</u> 1958 acrylic on canvas 93 1/4 x 175 inches

<u>Artist</u>	<u>Title</u>
Kenneth Noland	8. <u>Shoot</u> 1964 acrylic on canvas 103 1/2 x 126 3/4 inches
	9. <u>Sarah's Reach</u> 1964 acrylic on canvas 94 1/8 x 91 5/8 inches
Clyfford Still	10. <u>Indian Red and Black</u> 1946 oil on canvas 76 x 68 1/2 inches

Sixteen paintings were given to the National Collection by Mr. Melzac.
They are:

<u>Artist</u>	<u>Title</u>
Willem de Kooning	1. <u>The Wave</u> 1942-44 oil on masonite 48 x 48 inches
Kenneth Noland	2. <u>Split</u> 1959 acrylic on canvas 94 x 94 3/4 inches
Milton Resnick	3. <u>New Bride</u> 1963 oil on canvas 117 x 204 inches
	4. <u>Untitled</u> 1975 oil on canvas 36 x 30 inches
	5. <u>Untitled</u> 1973 oil on canvas 30 x 23 inches

<u>Artist</u>	<u>Title</u>
Jules Olitsky	6. <u>Cadmium Orange of Dr. Frankenstein</u> 1962 acrylic on canvas 90 1/8 x 80 1/8 inches
Norman Bluhm	7. <u>Excalibur</u> 1960 oil on canvas 72 x 60 1/8 inches
	8. <u>Eudocia</u> 1967 oil on canvas 90 x 72 inches
	9. <u>Untitled</u> 1957 oil on canvas 72 x 72 1/2 inches
Michael Goldberg	10. <u>New Canaan</u> 1959 oil on canvas 30 x 35 inches
	11. <u>Untitled</u> 1953 oil on canvas 44 1/2 x 39 1/2
Howard Mehring	12. <u>Untitled</u> 1954 oil on canvas 37 x 22 inches
	13. <u>Banner</u> 1957 acrylic on canvas 52 x 65 3/4 inches
Paul Reed	14. <u>Untitled</u> 1962 acrylic on canvas 59 x 63 3/16 inches
Gene Davis	15. <u>Black-Grey Beat</u> 1964 acrylic on canvas 91 x 185 1/4 inches
Alan Fenton	16. <u>Transitional Cape</u> 1975 acrylic on canvas 120 x 96 inches

VALUE OF MELZAC ACQUISITION

Mr. YATES. Is there any way of knowing what the value of all of the paintings is?

Mr. BLITZER. Well, we paid \$1,029,000 for the paintings the NCFA purchased.

Mr. YATES. How many paintings were there included in that?

Mr. BLITZER. There were ten that we purchased.

Mr. YATES. You bought ten paintings. Those are gifts, and here is the purchase.

Mr. BLITZER. Yes.

Mr. YATES. You bought a Franz Kline. A not very large deKooning, 21 by 29.

Mr. BLITZER. I must say we had two appraisals, or three, I am not sure, but at least two appraisals.

Mr. YATES. Oh, of the value of the paintings?

Mr. BLITZER. Yes, of the value—

Mr. YATES. Of the ten or the others?

Mr. BLITZER. Both.

Mr. YATES. Both. Two appraisals from whom?

Mr. BLITZER. I would have to submit that.

Mr. YATES. Okay.

[The information follows:]

APPRAISERS OF VINCENT MELZAC ACQUISITION

For the ten paintings purchased from Vincent Melzac, there were three appraisers. They are: (1) Christie's Appraisals, Inc., New York, N.Y.; (2) Sotheby Parke Bernet, Inc., New York, N.Y.; and (3) Richard Bellamy, private dealer, contemporary art, New York, N.Y.

For the sixteen paintings given by Mr. Melzac, the appraiser was: Ramon Osuna, Osuna Gallery, Washington, D.C.

APPRAISAL OF THE MELZAC PAINTINGS

Mr. YATES. And what did the appraisal show? The value of these?

Mr. BLITZER. The appraisal showed that the value of what we bought was at least what we paid, and in fact somewhat more than what we paid. I am rather uncomfortable talking about the value of Mr. Melzac's gift. I can tell you that under the—

Mr. YATES. Well why are you uncomfortable? Is there something that we ought to go off the record on, or that we shouldn't include in the record?

Mr. BLITZER. I would be happy to talk to you about it. May I say this—

Mr. YATES. Sure you may.

Mr. BLITZER. Under the rules of the Regent Acquisition program, as I said yesterday, half of the Regents' money must be matched, either in kind or in money, and we are satisfied from the appraisals that we got that Mr. Melzac's gift meets that requirement.

Mr. YATES. Can you tell us discretely what I am trying to find out? I am trying to find out what the value of the appraisals was.

Mr. BLITZER. On the order of half a million dollars for the gift.

Mr. YATES. A half a million for the gift?

Mr. BLITZER. Right.

Mr. YATES. And how much for the purchase?

Mr. BLITZER. Over a million.

Mr. YATES. Over a million. Okay. And you think you got a good deal?

Mr. BLITZER. Yes.

Mr. YATES. Do the Regents pass on that?

Mr. BLITZER. The Regents established the fund, and there is internal machinery, as we were saying yesterday, that begins with the Museum and its director. It was approved enthusiastically by its acquisitions committee, by its entire commission.

NATIONAL COLLECTION OF FINE ARTS ACQUISITIONS COMMITTEE

Mr. YATES. Who is the acquisition committee?

Mr. BLITZER. It is a sub-group of the NCFA commission. I would have to supply the actual names.

[The information follows:]

MEMBERS OF THE ACCESSIONS COMMITTEE OF THE NATIONAL COLLECTION OF FINE ARTS COMMISSION

Mr. David Lloyd Kreeger, Mrs. Hiram W. McKee, Mr. Charles H. Sawyer, Mr. George Segal, Mrs. Otto L. Spaeth, and Mr. George B. Tatum, Chairman.

ACQUISITIONS COMMITTEE MEMBERSHIP

Mr. BLITZER. I might say, because I think it would be of some interest in terms of other things we have been talking about, the Director of the Hirshhorn Museum is ex officio a non-voting member of the NCFA acquisitions committee; and the Director of the NCFA is ex officio a non-voting member of the Hirshhorn acquisitions committee. So they are in touch with each other and aware of what each other's museums——

Mr. YATES. Don't they pat each other on the back, even if they don't vote?

Mr. BLITZER. Well, they get knowledge that way of what the plans of the other museums are. They sometimes say "You needn't buy that because we already have one."

ACQUISITIONS FUNDS

Mr. YATES. Tell us about the acquisitions fund. I think this is kind of unique. The Smithsonian established a five million dollar acquisition fund when?

Mr. BLITZER. About two and a half years ago.

Mr. RIPLEY. 1977?

Mr. BLITZER. We are just halfway through the five years.

Mr. YATES. And this was with your own funds, not with Federal appropriated funds? You didn't put all of the money in immediately, did you?

Mr. RIPLEY. No, we estimated we would put in a million a year over five years, wasn't that right, Charles?

FEDERAL APPROPRIATIONS FOR ACQUISITIONS

Mr. YATES. And your appropriated amount has been about \$800,000 over the three years. Each year.

Mr. BLITZER. That's the total for the last year. \$798,000.

Mr. YATES. And you are asking for the same amount this year, I take it.

Mr. BLITZER. We are asking for two increases. \$30,000 for the Portrait Gallery and \$30,000 for the Museum of African Art.

Mr. YATES. So, it will be \$860,000?

Mr. BLITZER. Well, slightly complicated by our overall inflation request, to bring it up to, I think, \$880,000.

Mr. YATES. So, the federal funding is used only for minor acquisitions.

Mr. RIPLEY. No, not necessarily, I wouldn't say so.

Mr. YATES. Well, a major acquisition would cost more than the amount the federal government makes available, so it would have to be. Well, it's either major, minor, or intermediate.

Mr. BLITZER. Since the money has to be spent in the year in which it is appropriated, the largest sum that any single museum gets is \$300,000 for the Portrait Gallery and they have chosen to spread that fairly broadly considering the range of their needs.

Mr. YATES. We make it available by museums.

Mr. BLITZER. Correct.

NEW RESOURCES FOR ACQUISITIONS

Mr. YATES. Should we set up a fund and let you decide year by year whether you want to use the whole \$800,000 for one acquisition and starve some of your museums for that year? Or should the practice be continued of making an amount available for each of the museums? Do you have any thoughts on that?

Mr. BLITZER. Frankly, this is not a very gracious answer, but the more important question is the amount available.

Mr. YATES. \$800,000. Are you inclined to sneer at that?

Mr. BLITZER. Not at all. We are deeply grateful for it and need it very much. But a single fund of \$800,000 that we somehow had to spread among all of the museums, I think, would be very awkward.

Mr. YATES. Would be awkward.

Mr. BLITZER. Yes.

Mr. YATES. In other words, it would make your particular job unbearable. Much more difficult.

Mr. BLITZER. I would probably be assassinated. I think it is important, also, for the various directors and their commissions to have some idea of how much money is available to them. I mean, if they were to come to us with their requests—I mean, some of the purchases are as little as \$50, for a print, say.

Mr. YATES. We talked yesterday about the fact that Carter Brown wanted to buy the Gonzales sculpture for the National Gallery of Art, and he was looking around for \$900,000. He agreed, and apparently many experts agree that this particular statue of Gonzales, which I think is titled, "Woman Combing Her Hair," is one of the great works of modern art. And, he couldn't find the \$900,000. You told this Committee that apparently Hirshhorn wanted it, too.

Mr. BLITZER. Yes, sir.

Mr. YATES. Which led me to speculate on the possibility as to whether or not we ought to set up an acquisitions fund that would permit the American museums to compete for acquisitions with

European museums whose acquisition funds are much greater than those which we make available. But, then, you would then have the problem, would you not, assuming that this happy prospect came along and you had this fund available, you would have the problem as to whether or not to buy the Gonzales for the National Gallery or for the Hirshhorn, wouldn't you?

Mr. RIPLEY. Well, I recall what King Solomon did.

Mr. YATES. He cut it in half.

Mr. BLITZER. It would not be unappealing, perhaps to have it shared.

Mr. YATES. As you have with the Stuarts. A division between Boston and Washington. What would be a reasonable amount for such funds? How much have you spent for acquisitions; you just spent a million dollars for acquiring these Melzac paintings. What did you spend from private funds? Why don't we find out what you spent from your private funds for the last five years, for example?

Mr. BLITZER. Could I tell you—

Mr. YATES. The government funding. Sure, you may, in just a second. The government funds won't permit the purchase by any single museum of such works of art as the Gonzales. Wouldn't permit the purchase of the Jackson Pollock painting, for example, that the National Gallery bought for a sum, which I am told, is almost two million dollars.

Mr. RIPLEY. That's the Government of Australia.

Mr. YATES. Well, the Australian museum was Jackson Pollocks, Blue Poles, and that was bought for two million dollars.

Mr. RIPLEY. That's right. And, then the National Gallery—

Mr. YATES. So, it wouldn't permit that kind of purchase. I don't know, where did the National Gallery get its two million dollars for that?

Mr. RIPLEY. They got it from their endowment funds.

Mr. YATES. From their endowment funds. Why don't they use their endowment funds for the Gonzales, then?

Mr. RIPLEY. I suppose it depends on how they are drawn down in any particular cycle of time. The endowment funds are limited. They also have a collector's fund which is an annual subscription by interested friends of the Gallery, who then produce about one million dollars.

Mr. YATES. Well, would such a fund be helpful?

Mr. RIPLEY. Yes.

Mr. YATES. How should it be set up? What organizations should share in this fund? Of course, the National Gallery is a part of the Smithsonian, too, isn't it?

Mr. RIPLEY. Yes.

Mr. YATES. Technically, or legislatively, let us say. Who else would you think there would be?

NEW ACQUISITIONS FUND FOR MUSEUMS

Mr. RIPLEY. I think it would be very fine to have an acquisitions fund that could apply to museums—

Mr. YATES. Do you want to submit something on the record for this? Let's do this. Let's submit it for the committee. Do you have something drafted?

Mr. RIPLEY. I asked Mr. Blitzer to be thinking about this and to see if he could prepare some kind of program.

Mr. YATES. I don't know whether this is the time to do it because of the constraints of the budget, but perhaps some day in the future it will come to that because the museums of the whole world are competing for these works of art as individual collectors turn over their possessions to the public.

Mr. RIPLEY. There should be some mechanism, Mr. Chairman, I believe, that the pro-rata like quality of it could be borne in mind in terms of the actual funds available to any institution. I recall that last year in public hearing you were approached by a number of the institutions which are not administered through annual appropriation funds, or do not have them available, and they complained to you about the fact that it was, in effect, unfair that they had to seek other sources of funds. We, at the same time, could point out that we are deprived of seeking other sources of funds, either in fact or by the constraints of public opinion where foundations or other donors tend to feel that we are especially privileged and therefore do not require the same degree of private or outside support. You will find that a number of these institutions are really quite well-funded and do occupy a track in which they submit requests for purchases and grants to their own trustees who have endowments or foundation sources available to them. So, I think any such acquisition fund should bear all these kinds of factors in mind. Those museums whose need is actually demonstrably greater and can be proved to be greater as against those whose needs are somewhat less.

There should be a kind of pro rata system worked out in this connection. So, it's a very complicated suggestion and one that we would have to study a great deal.

Mr. HUGHES. It seems to me, Mr. Chairman, from a mechanical standpoint, most of the machinery may well be in place, at least as far as the Smithsonian is concerned. The question boils down to the problem which you are too well acquainted with, that is, the level of funding, and perhaps the question also of carry-over of funds to permit accumulation. Both the level of funds and the carry-over present some problems, but I think those are the two real questions. Beyond that, if there is a single fund for museums under different jurisdictions there are some Solomon-like problems to be approached, either cooperatively among the museums or perhaps by arbitrary splits by the Committee.

LAPSE OF FUNDS APPROPRIATED FOR ACQUISITIONS

Mr. YATES. Now, you get \$800,000 a year for each museum.

Mr. BLITZER. Total. All museums.

Mr. YATES. May the Freer, for example, which would receive \$200,000 of that, I assume, as an example, or the Hirshhorn—

Mr. BLITZER. I'm sorry. The \$800,000 is the appropriation for all the museums.

Mr. YATES. Right

Mr. BLITZER. The Freer receives no appropriated funds for purchases.

Mr. YATES. It does not. Why doesn't it?

Mr. BLITZER. Well, that was one of the requests that didn't survive OMB this year.

Mr. YATES. Did it not receive any money last year?

Mr. BLITZER. They have never in the past.

Mr. YATES. Why shouldn't they receive money?

Mr. RIPLEY. There is no reason why they shouldn't and we have continually asked for it in the last few years.

Mr. YATES. Has OMB stricken them out each time?

Mr. RIPLEY. We have never been granted any.

Mr. YATES. Well, let's leave Freer for a moment and talk about Hirshhorn. Hirshhorn has \$200,000 made available for acquisitions by the Budget?

Mr. RIPLEY. Well, I think Mr. Hughes' point is—

Mr. YATES. Okay. Let's look then at page 66; \$233,000 is requested for acquisitions for collections. Now, does Hirshhorn have to spend that in the fiscal year because of the fear of lapse?

Mr. BLITZER. Yes.

Mr. YATES. Well, that is a flexibility that we can take care of. Can we provide a fund for something like that so if Hirshhorn wants to save its money and accumulate it over a period of time, why shouldn't they be able to do that. Would that help?

Mr. RIPLEY. It would be very beneficial. Because in any particular year, there is no way of assessing the specific objects that might come up.

Mr. YATES. Okay, we will think about that.

Mr. BLITZER. Might I say a word about what—

ACQUISITIONS HISTORY

Mr. YATES. You may indeed. I hope you will provide for the committee's file a list of everything that has been acquired by your various museums under the appropriated funds. And for the last five years to list all the acquisitions from non-appropriated as well as appropriated funds. Can you do that?

Mr. BLITZER. I would be delighted.

VALUE OF GIFTS

Mr. YATES. I think we would like to know the amount, Charles, unless that embarrasses you in some way.

Mr. BLITZER. For which?

Mr. YATES. The acquisitions.

Mr. BLITZER. The only thing that embarrasses me, I really should be clear—

Mr. YATES. No, no, does putting those amounts in embarrass you in any way?

Mr. BLITZER. No, I think not. The only thing that embarrasses me with Melzac is putting a value on his gift. We have a policy that we don't do that.

Mr. YATES. Well, IRS will.

Mr. BLITZER. Well, that's precisely because it is between the donor and the IRS.

Mr. RIPLEY. That's between the donor and the IRS, not the public.

NATIONAL COLLECTION OF FINE ARTS FELLOWSHIPS

Mr. YATES. Now, NCFA grants fellowships. Do you want to put a list in the record to whom the fellowships went?

Mr. BLITZER. Certainly.

[The information follows:]

RESEARCH FELLOWS AT THE NATIONAL COLLECTION OF FINE ARTS—ACADEMIC YEARS 1978-79 AND 1979-80

1978-1979

Celia Betsky—(without stipend) "Inner Spaces: The Interior in American Art and Literature, 1860-1910."

Michele Bogart—(Without stipend) "The Problem of Reproductions of Works of Art in Late Nineteenth Century America."

Douglas Hyland (without stipend) "Lorenzo Bartolini and American Sculpture, 1825-1850."

Bruce Weber (without stipend) "Robert Frederick Blum (1857-1903) and His Milieu."

H. Nichols Clark (six-month stipend) "Impact of Dutch Painting on American Painting in the First Half of the Nineteenth Century."

Jean Yellin (six-month stipend) "Abolitionism, Feminism, and Images of Slavery in Nineteenth Century America."

Charles Eldredge (six-month stipend, NCFA funds) "American Imagination and Symbolist Painting, 1885-1917."

Wanda Corn (with stipend) "The American Artist and European Modernism, 1880-1940."

Michael Shapiro (with stipend) "The Development of American Bronze Foundries: 1850-1925."

David Schuyler (six-month stipend) "Public Landscapes in Urban America, 1830-1860."

David Killoran (without stipend) "The Kinship of Nineteenth-Century American Painters and Writers."

Ellen Landau (without stipend) "Lee Krasner and the Development of Abstract Expressionism."

Jeremy Adamson (with stipend) "American Paintings of Niagara Falls, c. 1800-1880."

Gilbert Vincent (without stipend) "Artistic Perceptions of Eighteenth Century America from 1870-1920."

Mitchell Kahan (without stipend) "Subjective Trends in American Art of the 1930s; Surrealism and Magic Realism."

Harold Nelson (without stipend) "The Image of the Self and the Other in the Paintings and Drawings of Romaine Brooks."

Miranda McClintic (without stipend) "David Smith's Paintings."

James Yarnall (with stipend) "John La Farge's Theory and Practice of Landscape Painting."

Julie Schimmel (without stipend) "Westward the Course of the Empire: The Rise and Progress of John Mix Stanley."

1979-1980

Henry Adams (with stipend) "The Opalescent Mind: A Study of John La Farge."

Wilford Scott (with stipend) "Philadelphia Modernism, 1905-1920."

Jennifer Gibson (with stipend) "The 1930s in New York: Radical Politics and Avant-Garde Art."

Merrill Schleier (with stipend) "The Image of the Skyscraper in American Art, 1900-1930."

James Yarnall (without stipend) "John La Farge's Theory and Practice of Landscape Painting."

Julie Schimmel (with stipend) "Westward the Course of the Empire: The Rise and Progress of John Mix Stanley."

Jeremy Adamson (without stipend) "American Paintings of Niagara Falls, c. 1800-1880."

Ellen Landau (without stipend) "Lee Krasner and the Development of Abstract Expressionism."

Edith Tonelli (without stipend) "Government Support for the Arts under the Federal Arts Project in Massachusetts."

Helene Roux (without stipend) "The Life in Paris of American Painters at the end of the Eighteenth Century and beginning of the Nineteenth Century."

NATIONAL COLLECTION OF FINE ARTS 19TH CENTURY PROGRAM

Mr. BLITZER. May I say a word about the NCFA's 19th century program?

Mr. YATES. Sure, you may.

Mr. BLITZER. I ask your indulgence. We have nothing as exciting as the end of the universe or the beginning of time or the Panda's problems, but—

Mr. YATES. Well, you know, some of the people are talking about the rate of inflation marking the end of the universe.

Mr. BLITZER. That may very well be. I do think it is in order to say a word about the National Collection of Fine Arts.

Mr. YATES. Okay.

Mr. BLITZER. When I came here, really, it was rather drifting, not only geographically without a physical home of its own but, I think, also intellectually. It didn't really seem to know what its place was in the constellation of museums in America or in Washington. Since then, largely, I must say, because of Joshua Taylor and his—it has become, I would say, the most important single center for the study of American art that exists in this country.

It's a very peculiar situation now. As you say, American paintings are bringing these fantastic prices, two and one-half million dollars for a Frederick Church, or two and one-half million dollars for a Jackson Pollock. Nevertheless, the study of American art is really incomprehensibly neglected. Harvard University, for example, which has enormously distinguished people in almost every field of art has no formal program in American art at all.

Joshua Taylor, really, I think, has worked a kind of quiet revolution in this field. I am happy to say that he has recently been recognized by his election as President of the College Art Association which is the professional association of art historians and people concerned with art.

The request for the \$75,000 increase is simply an attempt on our part to build on the strength of the NCFA, to bring in one additional senior scholar, to enable the Museum to bring in two additional fellows each year, and to have one other person, a scholar-in-residence, at various times each year. I must say that, I think, as a kind of national service, this is about as good as an investment as I can think of in a field that is just beginning to develop. If you noticed in one of the local newspapers when the Luminist Show opened at the National Gallery there was an interview with John Wilmerding, the curator there, an extremely able young man. He said that it was Joshua Taylor who created the atmosphere that made it possible for him to accept a job in Washington.

Mr. YATES. Good.

Mr. BLITZER. That made us feel very good.

NATIONAL PORTRAIT GALLERY

Mr. YATES. Looks like we are moving backward in time, doesn't it. We started with recognition of the abstract expressionists who are current and now we are moving backward through time to the other American artists, giving them the recognition they deserved.

Well, \$40,000 for the installation of appropriate combined prints and photographs study area. Is this non-recurring? Where will this be?

Mr. BLITZER. The present plan is perhaps not the definitive one. It is to put it on the balcony in the polychromed third floor room in the National Portrait Gallery part of the Patent Office Building. They have had some exhibitions in that space, hanging parts of their collection that they can't show in their own galleries, and now the idea is to use that as this combined prints and photographs study area.

Mr. YATES. What did you say they used now? Do they have a place?

Mr. BLITZER. They really don't. The curators' offices are the only places they have available. As I said yesterday, they work with a shoe-horn in that building. They are converting most of their garage in the building into work space of various kinds.

Mr. YATES. The National Portrait Gallery?

Mr. BLITZER. Both. The National Portrait Gallery and the NCFA and the Archives of American Art which all live together in that building.

Mr. YATES. I must say as one who has parked in that garage, it isn't a very desirable place to work.

Mr. BLITZER. It certainly is not. That is one reason why we look fondly at the Tariff Building as a solution, someday.

Mr. YATES. When are you going to solve that?

Mr. BLITZER. Well, when the General Services Administration finds a home for the International Trade Commission, I would love to come back and talk to you about it.

Mr. YATES. I must say, the Smithsonian is certainly an active organization.

Mr. BLITZER. A 26-ring circus.

Mr. YATES. Yes. Here you have a symposium on the "Art of Biography" which was made possible by a grant from Smithsonian's Educational Outreach Program. It was held in the National Portrait Gallery in November. Who do you invite to such things? Does the public come to that?

Mr. BLITZER. Well, the public was invited. I think there is a list of biographers who participated.

Mr. YATES. Leon Edel. Justin Kaplan. Doris Kearns. Barbara Tuchman. Very distinguished group.

Mr. BLITZER. Extremely interesting and produced a very interesting book which is a little easier than "The First Three Minutes of the Universe."

Mr. YATES. Where is the book?

Mr. BLITZER. I would be happy to get you a copy.

Mr. YATES. Among all these goodies that grace the table here, I don't have one on the art of biography.

Mr. BLITZER. Oversight.

DIRECTORS OF VARIOUS GALLERIES

Mr. YATES. Oversight. That's the function of our committee. There you are. Hirshhorn. NCFA. Portrait Gallery. When are you going to bring the directors of the various galleries in? So that we may hear them?

Mr. BLITZER. I would be delighted to do that. I think that they would state their case much better than I can.

Mr. YATES. The committee would love to meet Mr. Sadik of the National Portrait Gallery and Mr. Lerner of Hirshhorn and Mr. Lawton of Freer.

Mr. BLITZER. A very impressive group.

Mr. YATES. I think they probably would like to tell us what their problems are other than having—not that you are doing a bad job for them.

Mr. BLITZER. Well, they can do better.

Mr. YATES. No, I wouldn't say that, but I think it would be helpful to bring them in. You don't have nearly enough people here today.

Mr. RIPLEY. Yes, if we get a bigger room.

HIRSHHORN MUSEUM AND SCULPTURE GARDEN

Mr. YATES. Hirshhorn Museum and Sculpture Garden. Hirshhorn gets an awful lot of people, doesn't it? What is the visitation rate of Hirshhorn?

Mr. BLITZER. Last year, it was 1.2 million, Mr. Chairman. I think it may be the most popular museum devoted exclusively to modern art.

Mr. YATES. I read in the paper that Mr. Hirshhorn was selling some of his paintings. Was it last year?

Mr. RIPLEY. Yes. This has not happened, yet. We don't know what its status is. He is considering auctioning off some of the objects which he did not give.

Mr. YATES. Which he did not give to the Hirshhorn Museum? He retained some of them?

Mr. RIPLEY. He retained many objects and he has, of course, a perfect right to do what he wishes with them.

Mr. YATES. Are you applying pressure on him of any kind?

Mr. RIPLEY. No, I have been discussing the question with him for the future because he is sincerely anxious to make up for the fact that the million dollars which he gave in the beginning for an endowment for purchase went into building instead, as the cost increased, and I think he would like very sincerely to try and do something about that.

Mr. BLITZER. He has continued to give works to the Museum.

Mr. YATES. Has he?

Mr. BLITZER. Every year. Oh, yes.

Mr. YATES. Well, do these come under your acquisition reports, then?

Mr. RIPLEY. Yes, they should be in the Hirshhorn report.

Mr. YATES. I think that will be fine. And, you would show in that category the donors as well, wouldn't you?

Mr. BLITZER. Sure.

Mr. YATES. When they occur.

Mr. RIPLEY. Unless they have chosen to be anonymous but most of them are known.

FREER GALLERY OF ART

Mr. YATES. Freer Gallery. You want to search for and acquire works of Oriental art. There is one position for \$50,000. "To hire a librarian with fluency in the Japanese language." Why is that necessary?

Mr. BLITZER. Well, a very large part of the library's collections are in Japanese.

Mr. YATES. Do you not have anybody there who speaks Japanese?

I remember that Phil Stern spoke Japanese.

Mr. RIPLEY. Yes, we have two curators, now, who speak Japanese.

Mr. YATES. But you need a librarian, too?

Mr. RIPLEY. Mr. Shimizu and Ms. Yonemura.

Mr. BLITZER. But, the feeling is that they should not spend their time cataloging books.

Mr. YATES. How should they spend their time?

Mr. BLITZER. I'm sorry, the people the Secretary mentioned are curators in the museum.

Mr. RIPLEY. We have two current curators who speak Japanese both of whom are ethnic Japanese.

Mr. YATES. Well, now, that says hire a librarian with fluency.

Mr. BLITZER. Yes. There is no librarian who speaks Japanese.

Mr. YATES. Oh, and the others are lonesome?

Mr. BLITZER. In fact, there is only one other librarian in the Freer Gallery.

Mr. YATES. Okay.

Mr. BLITZER. There are probably too many pieces of paper drifting around but perhaps you would be interested since part of this request is for \$5,000 for printing costs of material such as that one page handout that you have before you. It's rather interesting business. We had a discussion at the Freer Gallery with the Smithsonian Council and it is something that goes on now in art museums, and, I guess, in all museums constantly. How much information should you give the visitors and how should you give it to them? One school says that you put the work of art up on the wall and just tell them the name and the date, and let them look at it. And, the other school goes to the other extreme and says that you tell them everything you know about it.

I think this notion, which is not original, at the Freer is a very happy compromise in making the information available but not on the wall where it gets in the way of looking at things. We've tried this with a very small amount of trust funds and now would like to expand it.

ARCHIVES OF AMERICAN ART

Mr. YATES. It's beautiful. And, you have made something of your Archives of American Art, haven't you?

Mr. BLITZER. Well, they have made it themselves, really.

Mr. YATES. Yes.

Mr. RIPLEY. This is an enormously successful program, as you know, Mr. Chairman.

Mr. YATES. Yes.

Mr. RIPLEY. I have just visited their California branch which is in the DeYoung Museum. It is one of six branches of the Archives.

Mr. YATES. Are those the regional centers?

Mr. RIPLEY. Regional centers, yes. And, they have a very active acquisition program and considerable local support in each case of these regional centers. Both from museums and museum staffs and curators and also from the public.

COOPER-HEWITT MUSEUM

Mr. YATES. Next is Cooper-Hewitt. I remember Mrs. Taylor telling me when I visited Cooper-Hewitt that Cooper-Hewitt has more drawings by Frederick Church than any other museum in the country or the world.

Mr. BLITZER. I am sure in the world. I believe that somewhere here is a catalog of a SITES exhibition drawn from the Cooper-Hewitt Collection of Frederick Church drawings done by Mr. Stebbins of the Boston Museum.

Mr. YATES. Yes.

Mr. RIPLEY. This is a Cooper-Hewitt exhibit, Mr. Chairman.

Mr. BLITZER. Which was organized by the Traveling Exhibition Service. Which is obviously one of the reasons why we are asking for a paper conservator. They have not only a great collection of Church drawings, but they say, I have to believe what they tell me, the largest collection of drawings in the United States.

Mr. YATES. Beautiful book.

Mr. BLITZER. Cooperation with the Museum of Fine Arts.

Mr. YATES. Last year, there was a reduction of your request for \$100,000 for Cooper-Hewitt to \$75,000. This year you have asked for \$125,000, for Cooper-Hewitt. Is that for the reduction that was made for last year?

The reduction was in 1979.

Mr. BLITZER. We are asking for an increase of \$50,000 but my memory is that the reduction last year was in the budget for exhibits.

Mr. YATES. Yes. How many people does Cooper-Hewitt have now?

Mr. BLITZER. Working for them?

Mr. YATES. Yes.

Mr. BLITZER. Twenty-one federal employees and twenty-four other employees. That does not count centrally budgeted employees.

Mr. YATES. I visited the Cooper-Hewitt myself some months ago and I saw the time it was under construction. They've done a remarkably good job of putting it together. Does the fact that it's located in New York present you with problems?

Mr. BLITZER. Some. It doesn't help our travel budget. People have to go up there and look at it and people from there have to come down and talk to us. Something of a problem.

Mr. RIPLEY. They had just recently an extremely successful exhibition which I know we all saw here. It was called Smithsonian, and they had it in New York to familiarize people with the kind of

variety of things that we do down here in our museums and it aroused a tremendous amount of interest and I'm sure has increased the understanding in New York which as you very well know Mr. Chairman is rather a parochial place in terms of awareness of things that go on in other major cities around the country.

THE MUSEUM OF AFRICAN ART

Mr. YATES. All right. The Museum of African Art, you want \$30,000 for acquisitions. That won't provide them with much will it?

Mr. BLITZER. No, sir.

Mr. YATES. How are you getting along?

Mr. BLITZER. Very well. We're learning to live with each other and know each other. Respectfully—

Mr. YATES. Have you learned to like each other?

Mr. BLITZER. We liked each other before we got married.

Mr. YATES. Ah. Does that carry over now that you're married?

Mr. RIPLEY. Well, we're getting to know each other. We have a good board of trustees, a council.

Mr. BLITZER. An excellent advisory group including former Mayor Washington, and Commissioner Duncan and Senator Humphrey's sister. We're especially working to bring about cooperation between that museum and our department of anthropology and we have found ways of protocol now of ways in which they will work together; for example, the fact that there will be a single catalogue of African materials in the Smithsonian which includes all their holdings and the anthropologists' holdings.

Mr. YATES. Let's talk about Public Service now. Mr. Euell?

Mr. EUELL. Here I am.

REQUEST TO COVER BASE SHORTAGE

Mr. YATES. You want \$10,000 to keep pace with merit promotions and higher benefit costs. Why is this a controllable program rather than being in the same category as the uncontrollable increases which are described on Page A-11?

Mr. YELLIN. Mr. Chairman, it could very well be described in the former section. We have it described here because it's an existing base deficiency that we've had for a couple of years and hope to correct it through the budgetary process.

Mr. YATES. Well, if it's corrected, do you then move it over to the other? You want a line item for this, in other words.

Mr. YELLIN. No, sir, the reason the \$10,000 is here is that the cumulative effect of promotions and the like have caused the base deficiency for this office. Once the money would be received, we would take care of the within-grades and so forth in the uncontrollable section.

Mr. YATES. Okay. So this is just to catch up?

Mr. YELLIN. Yes, sir.

Mr. YATES. Let's talk about the International Exchange Service. I don't know whether other agencies do this, but this seems to be a very good idea. You put out a guide which tells people who are disabled how they may use the facilities of the Smithsonian. I think that's a very good idea, and you should be commended.

ANACOSTIA NEIGHBORHOOD MUSEUM

Anacostia Neighborhood Museum—wait a minute, did we run across that—how's that working, Julian?

Mr. EUELL. It's working very well, Mr. Chairman. As you know, we're in the process now of review of the program to see if there are any new directions we might take. We've had several people giving us advice; we've been looking at it internally ourselves to see what we might do to improve the Museum and its programs.

Mr. YATES. Well, the Washington Post has an article on March 6 in which they discuss under the headline, "Anacostia Museum Seeks New Status From The Smithsonian." What does he want you to do for them?

Mr. EUELL. This is an interview with John Kinard.

Mr. YATES. What does he want you to do? Or doesn't he want you to do anything?

Mr. EUELL. Well, from that article, it says that John Kinard wants to have a museum of Afro-American history.

Mr. YATES. How will this differ from your African museum according to him?

Mr. EUELL. According to John Kinard or according to me?

Mr. YATES. Well, I'd rather have it according to you.

Mr. EUELL. The essence of the Anacostia Museum is that it's a neighborhood museum; the premise was to bring new kinds of cultural exchanges to a particular community.

Mr. YATES. Yes.

Mr. EUELL. I think that's a valid concept; we've established that, and it has caught on and been an inspiration for other neighborhood museums across the country. So in that sense, I think ANM has tremendous value.

There is a difference in terms of focus—if you're talking about the Museum of African Art as opposed to the Museum of Afro-American History. And I think we can very easily see that one has an art focus, and for some people maybe an anthropological focus as opposed to an historical focus, with Anacostia.

I also feel that what is done there—or in any neighborhood museum—has to reflect the community that it's in. And so there's a lot of work done in terms of art history and exhibits that are stimulated and generated out of that community.

I would also venture to say that there are comparable communities like Anacostia across this country, and in that sense, what Anacostia does in many ways, through its exhibitions, through some of its research, has a kind of impact on—and some of the information gathered could be used by—other communities of that kind; that are somewhat isolated, low income, a populace that doesn't use the traditional facilities.

Mr. YATES. Well, apparently Mr. Kinard doesn't agree with the report of the commission that's headed by Mr. Winston, director of Howard University's Moorland Spingarn Research Center.

So that at the present time, Anacostia goes on as Anacostia was; right?

Mr. EUELL. Yes, I would think so; and with whatever improvements that we feel should be made, we are in the process of discussing that and deciding on it.

Mr. YATES. All right, and you're still on good terms with Mr. Kinard?

Mr. EUELL. I would hope so.

Mr. YATES. Don't you talk to him?

Mr. EUELL. Oh, yes, I talk to him; quite frequently. A lot of people talk to him.

INTERNATIONAL EXCHANGE SERVICE

Mr. YATES. So as far as you know you're on good terms with him. All right. International Exchange Service. Legislation has been filed that will move this operation over to the Government Printing Office. Apparently that would be a good idea, wouldn't it?

Mr. EUELL. Yes, it would be. We are still waiting for legislation to develop.

Mr. YATES. Where is that legislation now? In Committee?

Mr. EUELL. It's still with the Committee.

Mr. YATES. Which Committee is it?

Mr. EUELL. I think it's Mr. Thompson's committee.

Mr. YATES. Education and Labor?

Mr. EUELL. No.

Mr. YATES. House Administration?

Mr. EUELL. Yes.

Mr. YATES. Maybe I'll talk to him. Doesn't he want to move it, or does anybody know why he doesn't want to move it?

Mr. POWERS. Because of the new Title 44 exemptions package which was created.

DIVISION OF PERFORMING ARTS—BLACK CULTURE PROGRAM

Mr. YATES. You want \$44,000 in the Division of Performing Arts for a new Black Culture program?

Mr. EUELL. Yes.

Mr. YATES. You want to tell us what you propose to do with it? What kind of program is it?

Mr. EUELL. Well, I don't know if you read recently of the program we did on the Civil Rights Movement at the Institution.

Mr. YATES. You mean the recording.

Mr. EUELL. Not just the recording; we did a whole program. For several days we had a colloquium and a seminar, and songs——

Mr. YATES. Yes, I did read about it.

Mr. EUELL. This would be a continuation of this kind of programming. We will continue to develop materials for schools to use in part of the curricula; we feel very strongly there's not enough material of this kind in schools and in the curricula, and this will also lead to recordings—a recordings program as well as a performance program.

Mr. YATES. The description on page A92 says that you want to expand research programs in Black American culture. Which "is intended to use and to build upon the results and experiences gained in the Civil Rights Movement conferences to be held during 1980. The objective will be to provide a better understanding of the unique role of spirituals and other forms of artistic expression of Black Americans. Particular, efforts will be made to locate and document recordings, tapes, and sources of historical information

which are in danger of being lost." These will be made available to the elementary and secondary schools.

Mr. EUELL. Yes.

Mr. YATES. And then you have a recording that I saw on the Civil Rights Movement, the Voices of the Civil Rights Movement.

Mr. EUELL. This was made during the conference. The conference has already taken place.

Mr. YATES. A couple of months ago, wasn't it?

Mr. EUELL. Yes.

Mr. YATES. And this was made at that time?

Mr. EUELL. Yes.

INCOME AND EXPENSES OF RECORDING PROGRAM

Mr. YATES. All right.

What happens to funds you receive for recordings? Do they go into the Federal treasury or the Smithsonian treasury?

Mr. EUELL. They go into the Smithsonian treasury, and of course some of the income from the recordings goes back in—you know, the income is recycled back into the program for additional programs and for new recordings.

Mr. YATES. Well, how much money is available for recording? The amount we make available to you is stated. This is out of the Division of Performing Arts, isn't it?

Mr. EUELL. Yes.

Mr. YATES. And this is \$3 million that you want for the next year. How much more do you get from your private funds?

Mr. EUELL. I'd like to ask Mr.——

Mr. YATES. Wait a minute; that's unrestricted funds.

You get \$3 million from your own money?

Mr. HOHENLOHE. Mr. Chairman, that represents the cost of producing the records. The figure that you see on page A91, fiscal 1980, \$2,690,000 represents the total cost of the development and production——

Mr. YATES. That's what it costs. All right. How much money do you take in?

Mr. HOHENLOHE. The original projection at the beginning of the year, fiscal year 1980, was that the net income for that whole program was under \$700,000. We've recently revised that projection downward, due to an increase in costs, to in the neighborhood of \$200,000.

Mr. YATES. Well how do you break even? You are expending \$2,269,000 for fiscal year 1980, and you want to increase that to \$3 million for 1981. And you take in \$700,000—some; right?

Mr. EUELL. That figure has been revised, Mr. Chairman down closer to \$200,000. This was a projection based on possible sales.

Mr. RIPLEY. The net would be after the expenses.

Mr. EUELL. About \$200,000.

Mr. RIPLEY. About \$200,000.

Mr. YATES. You make a profit?

Mr. EUELL. Surplus.

Mr. RIPLEY. Net profit.

Mr. YATES. Well, then you actually take in——

Mr. RIPLEY. Having spent \$2 million——

Mr. YATES. Having spent \$2,269,000 you take in about \$3 million, then.

Mr. RIPLEY. We should net about \$200,000.

Mr. YATES. All right, so you take in about \$2,900,000.

Mr. HOHENLOHE. Our revised estimate, Mr. Chairman, is that this year, gross, we will take in some \$3,900,000—

Mr. YATES. Wow.

Mr. HOHENLOHE. And spend \$3,700,000.

Mr. YATES. \$3 million you'll expend—\$3 million 7 and take in \$3 million 9.

Mr. HOHENLOHE. That's right, for a net income of about \$200,000.

Mr. YATES. Hey, you're really in business, aren't you, with this operation?

Mr. EUELL. What I'm saying is that the income from the recordings goes back into a number of other programs—the performance programs, the educational programs, concerts and other recordings. So it's not just surplus in that sense. We develop a lot of programs out of that money we receive.

Mr. YATES. Out of the \$200,000?

Mr. EUELL. Well not out of the \$200,000, but out of the income from the recordings.

Mr. YATES. Well maybe I don't understand it then, Julian. Mr. Hohenlohe said, that in fiscal year 1980 you anticipate that you will be expending approximately \$3 million 7, and you're taking in about \$3 million 9. Is that correct?

Mr. HOHENLOHE. That's correct.

Mr. YATES. Now the expenses of the \$3 million 7, are they only for the recordings?

Mr. HOHENLOHE. No. That includes a number of concerts, performances, and various other programs of the Division.

Mr. YATES. Okay. What does the income represent? Does the income represent only recordings?

Mr. HOHENLOHE. The income represents ticket sales for the concerts and various other activities.

Mr. YATES. Could you give us a breakdown of that for 1979? You don't have it for 1980, obviously; but do you have it for 1979?

Mr. RIPLEY. We can supply it for the record.

Mr. YATES. I'd like to see how you make your money and how you spend it in this operation.

[The information follows:]

Division of Performing Arts—Statement of Income and Expenses Fiscal Year 1979

Income:	<i>In thousands</i>
Ticket sales	\$163.3
Commissions	21.2
Record sales	2,995.6
Other income	1.3
Gross revenue	3,181.4
Less: Cost of sales	1,183.0
Net revenue.....	1,998.4

Expenses

Administration (The administrative unit supplies general management and support services to the programs of the Division).....	160.9
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Museum programs (Museum Programs is the Division of Performing Arts' liaison office with the museums and other bureaus of the Smithsonian. The concerts and special events produced by this unit are developed at the request of the museums with the goal of enlivening collections, adding an interpretive element to exhibits and enhancing the public service function).....	38.1
Black American culture (The program in Black American Culture conducts research and produces concerts, special events and publications, on various aspects of cultural history of Black Americans).....	82.0
Education Service (Education Services is the outreach activity of the Division of Performing Arts. The programs of this unit include the Recording Program, the Discovery Theater for children, and the Tour Program which arranges performances of Smithsonian programs in other cities and works in coordination with the Smithsonian National Associates Program. Educational activities include teaching aids, lesson plans and classroom activity guides which integrate and enhance young visitors' to the Smithsonian).....	1,412.6
Jazz program (The Jazz Program produces yearly concerts and publications which are supported by continuing research work on the history and development of this unique American music. These concerts and publications also include the history of the American Musical Theater.).....	127.7
Total expenses	1,821.3
Excess of revenue over expenses	177.1

Mr. YATES. You've got a good business going. You're almost as good as the Smithsonian Magazine. You bring in \$200,000 profit; you ought to be very proud of yourself. Mr Ripley, you ought to be very proud of him.

Mr. RIPLEY. I am.

Mr. YATES. All right, I just want to get that on the record.

ACTIVITIES OF THE DIVISION OF PERFORMING ARTS

Mr. YATES. Now that we've achieved that, what about the Division of Performing Arts. Are you doing as much as you would like to do? No, you're not, I know, but are you doing as much as you should be doing?

Mr. EUELL. Well we certainly could be doing more. In line with—

Mr. YATES. What more could you be doing?

Mr. EUELL. Well, we'd like to do more videotaping and more documentation of the programs, of the performances; and we are already in the planning stages with the Office of Telecommunications to do some of these things.

Mr. YATES. Well now I saw some television on the Civil Rights Movement, when it was taking place. Was there a tape made of it?

Mr. EUELL. Yes.

Mr. YATES. There was. So you have a videotape?

Mr. EUELL. We taped it, soundwise; audio, and we also videotaped it.

Mr. YATES. So that in addition to this recording, the Voices of the Civil Rights Movement, which is a series of records, apparently, you also have a videotape of it?

Mr. EUELL. Yes.

Mr. YATES. Good.

Mr. RIPLEY. But of course it is expensive, and we'd like to do more of it, because there are more of these events which should be documented.

Mr. YATES. Well, how expensive would something like that be?

Mr. EUELL. It depends on the length of time, but we've done a number of programs like this; we've done a number of short films; it averages out, if you do it in terms of broadcast quality; to about \$20,000 to \$30,000 each, depending on how long it's going to be, but it's at least \$10,000 to do it well—I'm talking about videotape.

Mr. YATES. Now this is only on the Freedom Songs, this recording that I'm referring to. Of the Freedom Songs themselves from 1960 to 1966. Do you have any recordings—or isn't this part of your operation? Do you have any recordings that have, say these speeches or these songs of Martin Luther King as he led some of these rallies?

Mr. EUELL. No, but many of these songs were developed out of the Civil Rights Movement by song leaders who worked with Martin Luther King, who traveled with him, but we do not have any songs written by him or any of his speeches or anything like that; we don't, no. A lot of the songs were certainly inspired by him.

Mr. YATES. And certainly his was one of the voices of the Civil Rights Movement.

Mr. EUELL. Yes, it was.

Mr. HUGHES. I think a point worth making Mr. Chairman is the fact that the Smithsonian is necessarily operating in its recording activities and some other activities on the margins of the commercial world.

Mr. YATES. You are doing better than that. You are making a profit.

Mr. HUGHES. We're doing well on the margin perhaps but my point would be that to the extent there are commercial recordings or tapings of Martin Luther King, they own them.

Mr. YATES. Who's they?

Mr. HUGHES. They are commercial, profit-making enterprises which own them and—

Mr. YATES. Well I'm not sure of that but there is certainly news coverage of Reverend King and his activities all during the period.

They own them. Who would own them? NBC and some of the news organizations.

Mr. HUGHES. Yes.

ELLINGTON SERIES

Mr. YATES. Just as you go back to record the Ziegfield Follies of 1919, I assume you could ask permission to incorporate some of these things into your activities. At any rate, I leave that to you because you're much smarter than I am in that field.

We're going to have about five new recordings of jazz and country music made available to the public. You have a fourth recording in the Ellington series. Now you say were being made, by the Ellington orchestra?

Mr. EUELL. No, sir. This would be—

Mr. YATES. What's the Ellington series?

Mr. EUELL. The Ellington series would consist of parts that have never been sold on the market or presented before, of the Ellington orchestra. And we're putting out a series——

Mr. YATES. With the group or with Duke Ellington?

Mr. EUELL. With Duke Ellington; these recordings have never been released in a sense. And Duke Ellington in the view of some historian's had a high period in the 1940's and we've extracted——

Mr. YATES. You'd be interested to know that Ezra Lattimore considers him to be one of the greatest of American composers.

Mr. EUELL. I believe that, too, sir.

Mr. EUELL. No monuments yet.

Mr. YATES. No monuments yet, how come?

Mr. EUELL. I don't know.

Mr. YATES. Well maybe we'll have to build one in London again. Where was that club outside Paris? That is a shame. We ought to be doing things like this. This is the fourth recording in the Ellington series apparently you have three others preceding this.

Mr. EUELL. Yes.

Mr. YATES. Where are they? Do you have one handy?

Mr. EUELL. No I'm sorry, I can have one sent up to you.

Mr. YATES. I just thought he was one of the greatest. But I just wanted to see what one looked like. You have Jelly Roll Morton and Fletcher Henderson but the recordings of the Ellington orchestra ought to be much better than those. Those are antiquated, they were antiques when they were recorded. Right?

Mr. EUELL. Some of them were.

Mr. YATES. But the first series of albums you did back——

Mr. EUELL. In the period.

Mr. YATES. Yes. How many are you going to make in the Ellington series?

Mr. EUELL. I'd say that this package will probably be the last one.

Mr. YATES. Who else are you going to do?

RECORDINGS OF OTHER ARTISTS

Mr. EUELL. Well we've just finished a recording of Freddy Keppard, who is a trumpet player that many of us believe was a major influence to Louis Armstrong.

Mr. YATES. Oh?

Mr. EUELL. Every great musician, or every great jazz musician in particular, had someone they listened to a lot and sort of started out from his style and developed through that.

We believe that Louis Armstrong developed through Freddy Keppard.

Mr. YATES. I thought it was Bix Biederdecke?

Mr. EUELL. Absolutely not.

Mr. YATES. Absolutely not. Now that the record is clear on that.

Mr. EUELL. Bix Biederdecke was a good player, a good stylist and picked up a lot from young trumpet players and cornet players of the period, from Louis and Keppard and Henry, Red Allen.

Mr. YATES. He picked up from them?

Mr. EUELL. Oh, absolutely. And in the midwest, Louis Armstrong came to the midwest; radio was really the thing then and musicians were doing a lot of listening to each other.

Mr. YATES. What was the name of that great trumpet player, not trumpet player, trombone player who was playing with the black orchestras and had his own orchestra.

Mr. EUELL. Tommy Dorsey?

Mr. YATES. No, before Tommy Dorsey.

Mr. EUELL. Jack Teagarden.

Mr. YATES. Yes that's the one. Now that we've covered those things. Do you also handle the Press for the Smithsonian Institution?

SMITHSONIAN INSTITUTION PRESS

Mr. EUELL. Yes I do.

Mr. YATES. You have a big business then, haven't you? You're an impresario.

Mr. EUELL. Please don't use that word.

Mr. YATES. What did you do with the Smithsonian Press. How many publications do you put out a year?

Mr. EUELL. Well, the Smithsonian Press traditionally puts out all the government publications, through the GPO. All the scientific publications, our series, and the required publications are done through the federal system with federal funding.

We also put out some twenty odd books per year through our private publications.

Mr. YATES. For instance, I take it that this Catlin book is one of them.

Mr. EUELL. Yes.

Mr. YATES. Smithsonian. Wow, that must have cost you a pretty penny to put out, didn't it?

Mr. EUELL. That's a marvelous book.

Mr. YATES. Oh, it's a marvelous book. Too bad its not in color. I guess that would have been too much wouldn't it?

Mr. EUELL. Isn't there some color in there?

Mr. YATES. There's some color in there, I didn't see them. Most of them are in black and white. No, it's a beautiful book. I don't see the price. How much would something like this cost?

Mr. EUELL. I'm not sure. About \$40.00.

Mr. YATES. Do you do the editing on this too?

Mr. EUELL. Yes.

Mr. YATES. You yourself?

Mr. EUELL. Not me, but the Press has editing staff, design staff.

Mr. YATES. And you're the boss?

Mr. EUELL. Yes.

Mr. YATES. How many such books did you put out last year and how are sales?

Mr. EUELL. On the private side, sales, we do 20 to 25 books on the private side. We do not sell——

Mr. YATES. What does that mean on the private side.

Mr. EUELL. On the private side, it means with nonfederal money, we do not use federal money.

Mr. YATES. You keep the money on the private side too.

Mr. EUELL. It's a very narrow margin.

Mr. YATES. Is that right?

Mr. EUELL. A lot of these books have a limited print run. We don't sell thousands and thousands of these books——

Mr. YATES. Are there any books that you sell a thousand of?

Mr. EUELL. Yes, we do——

Mr. YATES. I bet you'll sell thousands of "Zoo For All Seasons."

Mr. EUELL. We sell thousands of the Exposition books. We call them the Smithsonian Exposition Books. They are a popular book program. Our aim is to sell thousands of those and to reach a much larger audience with a lot of solid information but at a level that they can enjoy and understand.

Mr. YATES. This is a beautiful book. I'm sure it will sell a thousand. This being a "Zoo For All Seasons."

Mr. RIPLEY. It has sold very well.

Mr. EUELL. It already has sold a thousand.

Mr. YATES. How do you decide what books you want to publish. Does somebody come to you and say you ought to do a book on this subject. Or does somebody submit a manuscript to you?

Mr. EUELL. A number of ways. It's not usually somebody coming to me personally and saying I want you to do this book. We do have a mechanism by which we can introduce a book, we have people who initiate books. We have staff in the Press, in exhibition books. We have a Publications Coordinator.

And all our folks go around trying to initiate book ideas, talk to curators, talk to scholars——

Mr. YATES. Well who approves it? Suppose someone comes to you with this manuscript or this idea? You have to pass on it don't you?

Mr. EUELL. We have what we call a Publishing Council and whichever Director, either from Exposition Books or the Press, the manuscript comes to will present it to the Publishing Council as a book idea with the topic, cost, that sort of thing. And the Council decides on whether we go with it.

Mr. YATES. Suppose David Challinor wants to print a book on the edge of the universe. The only one who knows about it is David Challinor, your group doesn't know anything about the edge of the universe. Do you take his word for something like that?

Mr. EUELL. No, we wouldn't take his word, we would have other people in his field check it out. There is a process, it's not out of the ordinary.

Mr. YATES. Suppose Mr. Challinor wants a book printed, he would then submit a manuscript to a board?

Mr. EUELL. To the Press.

Mr. YATES. To the Press? Then your board would review this.

Mr. EUELL. Yes.

Mr. YATES. I see. Does he ever get anything printed?

Mr. EUELL. I'm sure he's published on his own but I don't recall having published him through the Press.

Mr. BLITZER. Mr. Chairman, Mrs. Challinor contributed to a book printed by the Press.

Mr. YATES. Good, she's a very marvelous woman. This obviously had to do with American history.

Mr. BLITZER. Exactly.

"SMITHSONIAN YEAR"

Mr. YATES. OK. The "Smithsonian Year." How many copies of "Smithsonian Year" do you publish? Can anybody tell us?

Mr. EUELL. I'll have to supply that for the record, I don't have it.

Mr. YATES. Is that the red book?

Mr. EUELL. The annual report, yes the red book.

Mr. RIPLEY. I don't know, sir, how many copies we do circulate. We can supply that for the record.

[The information follows:]

Smithsonian Institution Press

Smithsonian Year:	<i>Copies</i>
Average print run per year	2,500
Distributed	2,375
For special requests during year	125

Mr. YATES. Can you also supply it for the subcommittee.

Mr. RIPLEY. For the subcommittee?

Mr. YATES. We don't get copies.

Mr. RIPLEY. You do.

Mr. EUELL. We sent them to you, sir.

Mr. RIPLEY. They were addressed to you. Maybe they were stolen along the way because they are so popular. Every Member of Congress automatically gets one.

Mr. YATES. I don't remember the last time I got one.

Mr. RIPLEY. It must have gone over with a big bang. We'll send you another copy.

Mr. YATES. What's the last one Dillon put out?

Mr. RIPLEY. 1978.

Mr. YATES. That's the last one you put out?

Mr. RIPLEY. 1979 is in press.

MUSEUM PROGRAMS

Mr. YATES. The Assistant Secretary for Museum Programs, thank you very much. This is Mr. Perrot. Mr. Perrot would you be kind enough to explain the tinker toy or the erector exhibit that's over there.

Mr. PERROT. With the greatest of pleasure Mr. Chairman. This is the last phase of planning for the Museum Support Center. Planning which started over ten years ago and which led last year to an appropriation for the construction of the building itself.

What we are presenting today is the storage system which will be inside the building and which is a fully integrated system in that we have, as is usually the case in modern libraries, a stacking system which is integral with shelves, floors, supports, in short the whole apparatus coming as one unit.

We have chosen this system to maximize the use of space and as you will recall, Mr. Chairman, we made the commitment during the hearings that were before this committee and Public Works to use this building as economically as possible and have it last over the longest period of time.

By using this method we are able to squeeze out over 900,000 cubic feet of storage space while other techniques would have only

produced about 600,000 cubic feet, at a higher cost per cubic foot. If I may, Mr. Chairman, I would just like to stand up and show you the basic system. The basic system is a steel beam upright, going all the way up making the entire system self-supporting and reinforced in such a way that it will not sway or vibrate. The floor of this system, as it were, is hung on the basic storage system. Now the units you see here have removable fronts. In some cases we will have open shelves. In other cases we have shelves that are closed so as to prevent dust, however, we expect that there will be very little dust in the building because it will be fully air conditioned and we'll have the most advanced filtering system.

We will also be able to use existing drawers or new ones to put in wherever it seems appropriate to house a collection in mobile fashion.

One of the great advantages of this system is that it will gradually fill up the building over a period of years. Therefore, instead of moving horizontally, we are moving vertically. That is three stories will be built at one time and we can add bay by bay as required.

Mr. YATES. Are those cases, are those storage cases to be built from floor to ceiling on the first two floors.

Mr. PERROT. Yes, sir. But these are not storage cases that are inserted; the whole unit is a storage case.

FIRE PROTECTION

Mr. YATES. On the third floor we see parts, the red parts, which I assume are automatic sprinkling systems.

Mr. PERROT. Automatic sprinkling systems, air-conditioning, fire protection——

Mr. YATES. Is there a sprinkler system on the second floor.?

Mr. PERROT. This will be hanging, Mr. Chairman, from the floor above.

Mr. YATES. They are not on the model.

Mr. PERROT. It will only be the aisle that will be sprinkled. Only the aisles.

Mr. YATES. Suppose you have a fire over on the right side. What are you going to do?

Mr. PERROT. Well this is only a small part of the model, Mr. Chairman. If I may go on.

Mr. YATES. All right. I know you're not going to have any fires, but sometimes they happen.

Mr. PERROT. This is a modular system. What you see here is only the space that is taken up by one of these squares. It is a very small part of the model; it's a conceptual presentation which shows the basic equipment that we expect to build into this system.

In the initial move to the Support Center, we will move the collections that now are most compressed. For example, the Department of Anthropology will take this entire area, on three floors, as well as part of this second building on three floors.

The Department of Entomology in the initial move will only occupy this dark area. This will be left open to expansion. In this area we do not have to build the racking system now. The racking system will move vertically, like this.

Mr. YATES. Mr. Perrot, I'm still not sure I understand how it would work. Up here we have a sprinkler system.

Mr. PERROT. Yes, sir.

Mr. YATES. Suppose there is a fire that occurs right there.

Mr. PERROT. There will be a sprinkler system in each of the aisles. The cases and shelves are sealed and therefore there is no way for fire to come into them.

Mr. RIPLEY. You can't have spontaneous combustion in the cases.

Mr. PERROT. In this area we will have liquid storage and this will have very special kinds of protection and will be sealed off.

Mr. YATES. Why would you have alcohol stored.

Mr. PERROT. These are natural history specimens which are kept in alcohol.

Mr. RIPLEY. The alcohol is treated, Mr. Chairman, so it's not potable.

Mr. YATES. Some people consider it a treat.

CONSTRUCTION SCHEDULE

Mr. YATES. Okay, when is the building scheduled to be finished?

Mr. PERROT. The building is scheduled to be finished in the late fall of 1982.

Mr. YATES. Is it on schedule?

Mr. PERROT. As of now, we are on schedule.

Mr. YATES. Will it be next fall?

Mr. PERROT. Well, we hope it will be on schedule then also, with the help of the contractors and with the good will of the Congress.

Mr. YATES. That I am not too sure of.

Mr. PERROT. The reason we are asking for a starting increment to equip this building is that the equipment has to be designed, the manufacturer has to have his order, and we want delivery of the equipment to coincide with the phasing in of our move into the building.

So the storage equipment has to precede the actual physical occupation of the building.

Mr. YATES. Well, but what about the packing process—how about the process of moving your exhibits from the Smithsonian building over here? Have you started that?

Mr. PERROT. We have made advanced planning for this. The inventory process has been enormously helpful. A priority has been given, in the inventory, to all those collections that will be moved to the Museum Support Center. For example, somewhere around 88 percent of the collection of the Department of Anthropology of the Museum of Natural History will be moving. Priority has been given to inventorying those collections so that, at the time we are ready to move, we have accounted for every single item and we will know where it is supposed to go in the new building.

Mr. YATES. When will you start packing the Department of Anthropology, for example, in order to get it over, assuming that everything works on schedule? How long will it take them to pack up their belongings?

Mr. PERROT. Well, for certain parts of their belongings, it can be—

Mr. YATES. The shards and the pots.

Mr. PERROT. Can be moved in open trays without special packing procedures. Other items will have to be packed much more carefully. We expect, however, to do this with well-equipped trucks and with a well-trained staff so as to minimize the need for handling excelsior and that kind of thing.

INVENTORYING THE COLLECTION

Mr. YATES. All right, when we talked about initiating the inventory, it was speculated that you had about 75 million objects which would have to be inventoried. How close to inventorying your objects are you? How much of that 75 million have been inventoried?

Mr. PERROT. We have almost, I believe, half of the collection of the Department of Anthropology inventoried.

Mr. YATES. About 30 million objects?

Mr. PERROT. No, I am just speaking about Anthropology.

Mr. YATES. Anthropology.

Mr. PERROT. Our inventory process is on schedule. I have brought with me a chart that shows what has been accomplished. Some museums are already completed. For example, the Freer Gallery of Art has always had an inventory, and it is completed. The Hirshhorn will be completed this year. The Air and Space Museum will be completed in 1982.

Mr. YATES. Ah, you are doing the easy ones first.

Mr. PERROT. NCFA in 1983 will be completed. For MHT, certain sections will be completed in 1983, others will be phased in a little bit later than that. In the Museum of Natural History, we have Anthropology, which is now 55 percent completed, and we expect that the major part of it will be completed by the time of the move.

Mr. YATES. Your inventories are being taken under the direction of the Assistant Secretaries at the top?

Mr. PERROT. Absolutely.

DEACCESSIONING THE COLLECTIONS

Mr. YATES. And yesterday, Mr. Ripley said that you can—the Smithsonian has the power to dispose of its collections if it so chooses—is that correct?

Mr. PERROT. That is correct.

Mr. RIPLEY. Well, that is depending on the circumstances.

Mr. YATES. But everything else I assume you can.

Mr. RIPLEY. Well, I would have to examine that.

Mr. YATES. How would you answer that?

Mr. RIPLEY. I could determine that from the record of the acquisition.

Mr. YATES. What can you dispose of?

Mr. RIPLEY. Depending upon the nature of the gifts that you are—.

Mr. YATES. The question that comes to my mind is as you are conducting inventories, do you ever come across objects that you think would be of no use to the Smithsonian or you have duplicate objects and you'd better get rid of some of them so you won't take up so much space. What do you do in those cases?

Mr. PERROT. Mr. Chairman, as a result of the inventory we will have a far better knowledge and understanding of what constitutes a duplicate. We will be able to recognize those collections, particularly in the natural order, that have decayed by the passage of time to such an extent that they are no longer useful for historic purposes.

Mechanisms are being developed to dispose of those in an orderly fashion. I don't believe that there will be very much. But experiments in culling made a while ago showed that this would not relieve very much space.

However, as the Secretary said yesterday, we do in fact try to take advantage of possibilities of loans to other institutions as well as to compact our collections and to dispose of those items that really make no sense either historically or otherwise. At the present time, we cannot say how many of those there are because we haven't had an inventory.

Mr. RIPLEY. I think I implied, anyway, yesterday, Mr. Chairman, this collections inventory practice and the move gives us a far more coherent understanding of what it is that we really have—what we really need—and how we can dispose of objects that we don't need. We won't really know until we have done it in a very orderly fashion in this way. It's in our minds—we do not intend to just be a packrat organization and hold on to absolutely everything just because we have it. It doesn't make any sense in so many ways that it barely bears repetition.

STORAGE BOXES

Mr. YATES. Last year, the Committee provided \$200,000 for storage boxes. Have you bought the boxes or have you ordered them?

Mr. PERROT. That has been deferred, Mr. Chairman. We have at the present time approximately 34,000 containers in which collections are stored at the Museum of Natural History. A portion of those containers have outlived their useful life. They no longer are capable of being re-used. However, a large number of them will be re-used and will stay at the Museum of Natural History where they will be used to decompress the collection.

Our problem is not only a question of inventory but also a question of compression, a compression that goes far beyond anything that can be tolerated for the safety of these collections. We believe that with the Support Center and with the equipment that we have, we will be able to defer indefinitely the purchase of more quarter units or more drawers to house the collection.

Mr. YATES. So will the \$200,000 lapse then? Will it not be used?

Mr. PERROT. I would like to defer this to my colleague from Budget.

Mr. YELLIN. The \$200,000 has been in effect transferred to the new line item for Museum Support Center equipment. That amount combined with \$200,000 already in the Museum of Natural History base, which will be applied according to this plan over a five-year period—\$400,000 a year for a total of \$2 million.

Mr. YATES. Has the committee been advised of that?

Mr. YELLIN. I believe this document would be used to notify—

Mr. YATES. Okay, it's in your document here.

Mr. YELLIN. Yes.

Mr. RIPLEY. Page A-147.

SPACE FOR ART STORAGE

Mr. YATES. What if you don't get the Tariff Building?

Suppose in the passage of time and circumstance, the Smithsonian does not wind up the owner of the Tariff Building? What are you going to do for storage of the National Portrait Gallery and your other visual art museums?

Mr. RIPLEY. I suppose we will start picketing.

Mr. YATES. Picketing whom?

Mr. RIPLEY. Well, the GSA to begin with. It is a speculation. We have been consistently sort of teased into believing—by GSA administrators over the years since I have been here—that we would get this building in due course. So the question is how much pressure can we possibly apply when we hear in the meantime because of general conditions in the city, where tremendous amounts of the building and construction are for commercial use, that the GSA is shopping around for three million square feet of office space for other parts of the more high-priority agencies.

The GSA had a specific program for Turkey Point or whatever it was called——

Mr. YATES. Buzzard's Point.

Mr. RIPLEY. Buzzard's Point—Turkey Buzzard's Point, I guess I should say—that that might solve the problem. But of course the problem is that each one of these commissions or agencies feels that they must be somewhere near the pulse of the center of the capital and that they presumably don't want to move. Their building or quarters, no matter how rundown, get more attractive every year as the law of diminishing returns seems to apply.

Mr. YATES. So what you are saying is that we will cross that bridge when we come to it.

Mr. RIPLEY. What I am saying is, yes sir, we have become increasingly more frustrated every year about this problem.

Mr. YATES. How many years have you been here?

Mr. RIPLEY. Sixteen.

Mr. YATES. Wait until you have been here 30. Paul, what about the question of security for your Suitland facility? We talked about fire security and we have your—I assume that the building itself will be fireproof to the extent that it can be, and the boxes and storage facilities will be, too. What about security against theft?

PROTECTION SYSTEMS IN THE MUSEUM SUPPORT CENTER

Mr. PERROT. We expect to have a rather sophisticated system, Mr. Chairman. Every area will have general alarms, there will be detection devices in sensitive areas, there will be zones, all of this will be connected to a central point at the Support Center and this will interface with our master security system on the Mall.

Certain areas will only be available through cards, codes of various kinds. We believe that by separating the people activity from the collection activity, that means the offices, of which there will be only a few, the laboratories and the conservation facilities across from four buildings in which the collections will be housed,

that we can minimize intrusion. All visitors into the building will be monitored and will require appropriate identification. So, we expect to make it tight.

STAFF AT THE MUSEUM SUPPORT CENTER

Mr. YATES. Where is that staff located now?

Mr. PERROT. The staff is located now almost entirely at the Museum of Natural History with the exception of a small number at the Museum of History and Technology.

Mr. YATES. Well, that staff will be moved out to the Suitland area.

Mr. PERROT. Part of that staff.

Mr. YATES. Only part of it?

Mr. PERROT. We expect to maintain a scholarly presence on the Mall. Those collections that are moved——

Mr. YATES. What do you mean by that? We expect to maintain——will you be out there or will you be on the Mall?

Mr. PERROT. I will be on the Mall, but I don't count myself in that category. What I mean is that the curators of these collections will have small facilities at the Support Center where they can carry on their work, but they will not be constantly there. They will be interfacing with the collections and the public in the Museum on the Mall.

The major part of our conservation facility will be moved to here. There will be laboratories for conservation and for the teaching of conservation at two different levels: technician and specialist.

LIBRARY RESOURCES

Mr. YATES. What about libraries?

Mr. PERROT. There will be a library, which is integral to the Smithsonian Institution Libraries and which will be primarily concerned with conservation and with those collections which have been moved to the Support Center and to which scholars will require to have access to bibliographic references. We expect to interface this electronically with the master catalogue of the Smithsonian Institution Libraries and, as you may have noted in the Library line, we are going more and more into data bases, using microfilm and also using electronic retrieval from central bases which may be as far as California. By the time the Support Center opens, in conservation, for example, we will be able to call upon the resources of the British Museum.

COLLECTIONS AT THE MUSEUM SUPPORT CENTER

Mr. YATES. Have all decisions been made as to what you will store out there?

Mr. PERROT. Yes, sir.

Mr. YATES. What will you store out there? Will you be storing rare books, for example, out there? You are not going to be storing paintings out there. You hope to store your paintings in the Tariff Building.

Mr. PERROT. We will be storing 88 percent of the collections of the Department of Anthropology and various proportions of Ento-

mology, Botany, Mineralogy. The entire Oceanographic Sorting Center will be removed from the buildings at the Navy Yard, which we have been renting for the last few years. This will be removed to the Support Center. In addition, the Museum of History and Technology will have a small area. Its collections of musical instruments, pianos, and large things that require special environments will be in this location.

If you would like, I could submit again for the record a breakdown of the collections—an up-to-date breakdown—from one year to the other, there are slight changes in proportion.

Mr. YATES. I think we ought to have that for the record.

[The information follows:]

COLLECTIONS TO BE MOVED

The following collections will be moved from the National Museum of Natural History to the Museum Support Center when it is completed:

	<i>Percent</i>
Anthropology.....	88
Botany.....	25
Entomology.....	25
Invertebrate Zoology.....	20
Mineral Sciences.....	25
Paleobiology.....	20
Vertebrate Zoology.....	25
Smithsonian Oceanographic Sorting Center.....	100

These figures have been adjusted and refined in comparison to original estimates as the result of inventory activities and preparations for the relocation of collections.

COLLECTIONS OF RARE BOOKS

Mr. YATES. What happens to the collections of rare books, for example? Will you keep them on the Mall, or will you keep them out there?

Mr. PERROT. The collections of rare books, Mr. Chairman, if this committee approves, will eventually go into a central rare book library which will be located in the South Quadrangle. We hope that space in that complex will be sufficiently large to accommodate the collection. At the present time, we have a small collection of rare books in the Arts and Industries Building; we have a relatively small area that was developed to house the Dibner Collection in the Museum of History and Technology. And, we have a special collection of rare books at the Air and Space Museum—those are the books that are entirely concerned with air and space and whose presence in the Air and Space Library seems to be the most constructive.

SOUTH QUADRANGLE DEVELOPMENT

Mr. YATES. The Smithsonian South Garden development. I see that this is going to be right next to the Museum of African Art, the rare book collection.

Mr. PERROT. This is a preliminary plan, Mr. Chairman. But the general concepts are still valid.

Mr. YATES. Preliminary plan. Subject to change, is what you are saying.

Mr. PERROT. This is not, I believe, the plan that will be discussed later on today in detail. The general concept is there but the articulation of the spaces underground has been subject to a number of changes to allow a better flow of people, of objects—

Mr. YATES. Are you in charge of this, too?

Mr. PERROT. I am familiar with it, Mr. Chairman, but I am not—

Mr. YATES. Who is in charge of this?

Mr. PERROT. Mr. Peyton is in charge of the development, Mr. Blitzer is in charge of the museum aspects, I am only in charge of the library aspect.

Mr. YATES. Well, he's only in charge of the collections. Now, I see a room in your building, Mr. Ripley, called "Collection Support." Is that for raising money or is that for your collections?

Mr. RIPLEY. I'm not sure what it is at all, Mr. Chairman.

Mr. YATES. Over here. I'll show you. It says collection support. That isn't for collecting money from IBM or any of the corporations. That's just for your collections.

Mr. RIPLEY. I would assume not.

LOST OBJECTS

Mr. YATES. Okay. All right. Have your inventories turned up any lost objects? Or, would you know that?

Mr. PERROT. Mr. Chairman, we will not know until we reconcile the inventory record that is being built as part of the inventory process with the accession records. We are confident that no important item is missing because we presume that our curators and other staff members would be familiar with the location of any very important item.

Mr. YATES. Like a silver sugar bowl?

Mr. PERROT. Well, we would hope—touché, as my colleague said—that we have learned a lesson and I believe that an item of that kind—

Mr. YATES. Was it returned? Did they ever find it?

Mr. PERROT. To the best of my knowledge, we are still missing these objects. But, we can't say yet that they are lost, because we haven't found them. We are not able to say definitely that they are not somewhere in the vast storage areas and corners of—

Mr. YATES. Let's call it then, a preliminary survey indicates that you haven't been able to find that silver sugar bowl. What else of value has not turned up in the preliminary survey? This preliminary inventory.

Mr. PERROT. Nothing has been brought to my attention, Mr. Chairman.

Mr. YATES. Can I ask that of all the curators?

Mr. PERROT. I have asked our security department to provide a report, a confidential one, and that seems to support what I have said.

Mr. YATES. It does. Okay. That's true? Oh, David Challinor wants to speak up.

Mr. CHALLINOR. I can give one example of the kind of thing the inventories do show up. We were missing 15 rhinoceros horns—

Mr. YATES. Were you?

Mr. CHALLINOR. But I'm glad to say that they turned up and in this case we thought they should be under bones and they were under hair and we went into the skin collection and there they were. So, it does help us to find things like this, to try and find out what has happened to these objects. It has been very helpful that way. Some things that we thought were lost were indeed there, but we had to find the right place.

Mr. YATES. Yes. And, those are valuable, we learned this morning.

Mr. CHALLINOR. Yes, Sir.

THEFT OF SNUFF BOX

Mr. YATES. Okay, and what about Mr. Blitzer's operation? Anything missing there, other than what you disclosed previously?

Mr. BLITZER. There was one theft during the year, but that had nothing to do with the inventory.

Mr. YATES. What was stolen?

Mr. BLITZER. A snuffbox was taken from the National Collection of Fine Arts.

Mr. YATES. How could that be? I know it's a small object, but what was the—how was it being shown?

Mr. RIPLEY. It was human error.

Mr. BLITZER. It was very complicated. The smoke detecting system was being installed in the gallery. The gallery was closed off and cases were all covered. Somehow during that period, this thing disappeared.

Mr. YATES. What kind of snuffbox? Was that something of value?

Mr. RIPLEY. Yes, very valuable.

Mr. YATES. George Washington's snuffbox?

Mr. RIPLEY. It was given by Catherine the Great to Prince Orloff. Covered with enamel and diamonds. It was in the Gellatly collection.

Mr. YATES. What collection?

Mr. RIPLEY. The Gellatly collection. Mr. Gellatly gave a collection to the Smithsonian of works of art and decorative art objects, including this, in the 1920's, late 1920's. And, it was human error, because the system of the workman, security guard, and the people who were responsible for the case itself just temporarily broke down and during that moment, somebody lifted it.

Mr. YATES. Has the Smithsonian missed other objects in the past? That didn't show up?

Mr. RIPLEY. Well, we have had, from time to time, small missing things like the silver which, when an inventory was made, we discovered that some pieces that were missing. How to pin down the dates when these pieces might have been taken out, shall we say, is almost impossible.

Mr. YATES. I was wondering about paintings or graphics or things of that sort. The Georgia O'Keefe paintings is a case in point. And, I wondered whether or not—

Mr. RIPLEY. As far as I know, we don't have records that I can recall of that sort of thing.

Mr. YATES. Charles.

Mr. BLITZER. We won't know, as Mr. Perrot said, until the inventories are fully completed, we won't be able to answer this with total confidence. But, we do have now a kind of random spot check program that goes on and I am happy to say that to my knowledge that has not revealed any missing works of art.

VALUE OF THE COLLECTIONS

Mr. YATES. How can you designate any collection at the Smithsonian as any more valuable than another? But, your gem collection, your gold coin collection, the coins collection, your other important things, are subject to very intense scrutiny. Are they not?

Mr. BLITZER. Yes.

Mr. YATES. How often do you review that? How do you know? For the record, I think we ought to know what you do, unless we had better not put it on the record so that somebody, yeah—

SECURITY PROCEDURES

Mr. KENNEDY. With respect to both silver and coins we can give you an off-the-record very explicit statement as to what our procedures are.

Mr. YATES. Well, nothing will be off the record, because we have a reporter here.

Mr. KENNEDY. Then, we will just have to say that we are very careful.

Mr. YATES. Okay.

Mr. PERROT. Mr. Chairman, the inventory of the numismatics collection is a priority. The difficulty both with numismatics and philately—

Mr. YATES. Let me say this, Mr. Kennedy. I am not asking for the method that you use, what I am asking really is for how often you do review the collections to make sure that they are intact.

Mr. KENNEDY. I can speak as to silver at the moment. We have the best expert in the modes of keeping precise control of materials of that size and nature. We are following the recommendations of those people and we have a complete inventory of that sort of precious object and we do spot audits with, regularly within a schedule that is predetermined for anybody that has that kind of object. We don't want to describe the periodicity on the record, of course, but that process is now in place, the inventory is in place, we know the objects are there with respect to both silver, and I think I can say the same process applies to the numismatics collection, that is, coins, including the kind of gold objects to which you refer.

Mr. YATES. What about gems. Is that within your jurisdiction?

Mr. KENNEDY. That is Natural History, I think.

Mr. CHALLINOR. The gem procedure is just as rigid, we can give you full assurance on that. As you will recall, some decades ago, there was a famous theft in the American Museum in New York. As a result of that, all museums were shaken up, particularly our own gem collection which you can say now is very well protected. That was a stimulus, I think, not only for the American Museum to get organized, but all gem collections.

Mr. YATES. How do you know that your security measures are the best that can be made available? Have you ever called experts in to view them? What have you done?

Mr. RIPLEY. Yes. We have consultations from time to time. Again, we don't necessarily like to say how often.

Mr. YATES. Okay.

Mr. RIPLEY. With people who are professionals in the field of museum security. And, with their consultation, guidance, we attempt to determine whether our monitoring alarm systems are the best or whether we should have different ones. We do a great deal of ad hoc kind of consultation with these specialists to make sure that we are keeping things under control in this way.

Mr. YATES. Have there been efforts made to break into the Smithsonian building?

Mr. RIPLEY. Yes. A member of the diplomatic corps resident in Washington was arrested about three years ago having unscrewed the face of a smaller case and taken a couple of mineral specimens out. Rather fascinating example of sophisticated purloining.

Mr. YATES. Are there many attempts to break into the museums, or other buildings?

Mr. RIPLEY. Not so much in breaking in, no. The guard force and the fact that we have patrol dogs, things of this sort, are a very, very good insurance. Occasional vandalism, of course.

Mr. YATES. How much vandalism do you have?

Mr. RIPLEY. Well, I think there has been somewhat of a decline in the past year. My memory is that we have not had as many casual incidents of minor destruction. As I said, earlier——

Mr. YATES. Where would the vandalism occur? In your painting museums?

Mr. RIPLEY. As it may. And, as I said earlier, it may occur in the less occupied galleries. For example, a very, very heavily visited museum area is unlikely to have episodes of vandalism. And, this occurs around the world. If you have a gallery into which people hardly ever go, the attention span of the guard may be minimal in that room. He may be sleepy, or he may turn around, and it is possible to commit a vandalic act without necessarily stealing anything. They have scrawled chalk across a painting, something of this sort. You remember the incident when a woman tried to slash a painting here in the Capitol some years ago.

Mr. YATES. Somebody succeeded.

Mr. RIPLEY. Yes.

Mr. YATES. One of those huge paintings.

Mr. RIPLEY. One of those huge ones on the stairs, that's right. Occasionally, minor things happen like that. Not so severe. But, the work with chalk, for example, which is impressed on a scroll painting, let's say, a Freer painting, may require months and months and months of restoration to restore the surface tension so it looks unmarked.

Mr. YATES. Do you want to say something else?

Mr. PERROT. No, I wanted to comment much as the Secretary did. I will say that our security forces are in very close touch with Interpol, with the FBI, and other museum security departments around the country and abroad, so there is a network of intelli-

gence that goes on for new techniques as well as information about certain types of individuals who may be known to travel.

CONSERVATION PROGRAM AT THE MUSEUM SUPPORT CENTER

Mr. YATES. Now, you want an increase of \$89,000 to augment the conservation staff, and develop training programs with the Museum Support Center.

Mr. PERROT. That is correct.

Mr. YATES. That's going forward well, I take it?

Mr. PERROT. That is going forward. We expect to move in on schedule and develop a training program which will eventually help our own staff as well as museums around the country. We will do this in cooperation with an area university.

OFFICE OF INTERNATIONAL ACTIVITIES

Mr. YATES. We have an Office of International Activities. What does that do?

Mr. PERROT. That coordinates and assists the staff of the Institution in keeping in touch with foreign governments, and making arrangements for expeditions. For example, they coordinated the visits of the Smithsonian delegations to the People's Republic of China. They also assist foreign, either formal delegations, or colleagues in making arrangements with our museums. They assist all senior members of the staff since they have contacts with foreign embassies.

SMITHSONIAN INSTITUTION LIBRARIES

Mr. YATES. Okay. You want some money for a library technician to free the curator. That library is open by appointment only. Do you have the new technician?

Mr. PERROT. We hope that soon the Cooper-Hewitt library will be open on a regular schedule to the public. It is one of the major resources in New York City.

Mr. YATES. You want \$25,000 to hire temporary staff to code information into the automated record system. Is this a non-recurring cost?

Mr. PERROT. That, we hope, we can work this into the base. I'm not able to say that it will not recur next year.

CONTACTS WITH OTHER COUNTRIES

Mr. YATES. Well, now, Mr. Perrot. You described your exchange with the People's Republic of China. Do you have similar proposals or contacts with other countries?

Mr. PERROT. Not quite as formal as this, Mr. Chairman. This was the first time that a group from the Smithsonian was invited to the People's Republic to develop a full cooperative program of research in various aspects of natural history. This was on a fairly large scale. We expect in return, that a Chinese delegation will come this fall. But, we maintain very close contact with colleagues and institutions all over the world.

Mr. YATES. Does this include the Soviet Union?

Mr. PERROT. This has included the Soviet Union, Mr. Chairman. I do not know of any contacts at the present time that have been altered. I don't know of anything that is going—

Mr. RIPLEY. We don't have any programs.

Mr. PERROT. That was developed at this time.

Mr. RIPLEY. We have a small program in Egypt with the Suez Canal University. We have just signed an agreement with them to undertake marine studies in that area and we think that this will be very beneficial to the adjacent countries because the Red Sea is presenting a tremendous opportunity for research in the same way that our research sea-level canal studies in the Atlantic and Pacific are. There is a migration of animals into the Mediterranean which would crucially affect the fishing resources in the neighboring countries.

KEEPER OF RARE BOOKS

Mr. YATES. We notice that in 1979, the position of Keeper of Rare Books was transferred to the Library to encourage research using the rare book collection. Is this a Civil Service position? Keeper of Rare Books?

Mr. PERROT. The position, Mr. Chairman, I do not know if it exists in the Civil Service register, but it is, as indicated, to minister to the intellectual needs of our rare book collection by encouraging others to donate to our libraries, by studying our rare books, and by publishing either them or publishing articles and studies resulting from their presence in the institution's collections.

Mr. YATES. It's kind of a title that goes along with royalty, isn't it? Keeper of the Seal, and so forth? Keeper of Rare Books.

Mr. PERROT. It's an English title.

Mr. YATES. Who has that title?

Mr. RIPLEY. Silvio Bedini.

Mr. YATES. Silvio Bedini. And, he—Silvio, or Silvia.

Mr. RIPLEY. Silvio.

Mr. YATES. Like in—

Mr. RIPLEY. He comes from Waterbury, Connecticut. And he has been working in the museum for many, many years in the Museum of History of Technology, and he was particularly instrumental in bringing the Dibner Collection to the Museum. He is a specialist in the history of early technologies. He is someone who is working now with the Vatican Library and Museum to see if whether we can eventually develop an exhibition of some of their things in this country. And, he is extremely well qualified in the field of rare books.

Mr. YATES. We will give him the degree of KRB. The British have a degree called KCB, don't they?

Mr. RIPLEY. KCB, yes.

OFFICE OF EXHIBITS CENTRAL

Mr. YATES. We will call him KRB. Keeper of the Rare Books. Office of Exhibits Central. Prepares exhibits and exhibit-related products for the museums. Oh, they are the ones who prepare the layouts?

Mr. PERROT. They are the ones who assist the various museums in developing exhibition materials, Mr. Chairman. They have spe-

cial capabilities in film, silk screening, model making, and they also construct most of the exhibitions that originate from the Smithsonian Institution for SITES as well as do whatever alternations that are necessary for SITES exhibitions.

OFFICE OF HORTICULTURE

Mr. YATES. Very important. Who decides which orchids to use for your exhibits?

Mr. PERROT. Orchids?

Mr. YATES. Yes.

Mr. RIPLEY. The horticulturist. I mentioned yesterday they just had a wonderful collection of cymbidiums around the fountain. That's the horticulturist's job.

Mr. YATES. All one has to do is visit the preColumbian exhibit at Dumbarton Oaks. They have the most marvelous way of showing their exhibits. They have the glass cases, the beautiful glass cases, the plastic holders, and they are always embellished by orchids surrounding them.

Mr. RIPLEY. One of our technicians from Exhibits Central built those cases for Mrs. Bliss before that was opened.

Mr. YATES. Oh, really? He must have been a kid then.

Mr. RIPLEY. They are the world's most expensive lucite cases.

Mr. YATES. Okay. SITES. Who is in charge of SITES? Paul?

Mr. PERROT. Yes.

SMITHSONIAN INSTITUTION TRAVELING EXHIBITION SERVICE

Mr. YATES. You are an important fellow, Paul. Millions of individuals view SITES. I think that is one of the finest of the Smithsonian activities. I suppose you are constantly increasing the numbers of exhibits that are made available through SITES, aren't you?

Mr. PERROT. We are producing between 30 and 40 a year, Mr. Chairman.

Mr. YATES. Between 30 and 40 a year. And, keeping a plateau of about 140.

Mr. RIPLEY. 30 to 40 new ones.

Mr. YATES. How do you decide, Paul, on what you approve for SITES tour, or collection and tour?

Mr. PERROT. You mean the choice of a subject?

Mr. YATES. Yes.

Mr. PERROT. The choice of the subject can come in many different ways. For example, we just opened in Chicago an exhibition on Sevres porcelain. That—

Mr. YATES. Yes, but how did you decide that you wanted to have an exhibit of Sevres porcelain put into the SITES inventory?

Mr. PERROT. Well, we try to have as broad a menu as possible.

Mr. YATES. Who decides that? Do you decide that?

Mr. PERROT. It is decided by the staff of SITES. The director of SITES, in cooperation with—

Mr. YATES. Do you have a board like you do for your publications?

Mr. PERROT. They consult with appropriate curators in our various museums and other institutions for curatorial expertise. This

exhibition I am referring to is the first retrospective exhibition on SITES on Sevres in the United States and it has the first catalogue in English on the subject. It was published by SITES.

Mr. RIPLEY. The material did not essentially come from the Smithsonian.

Mr. PERROT. In this case, it was entirely loaned by the French Government.

Mr. YATES. Oh, really? For a SITES exhibit?

Mr. RIPLEY. Yes, we do——

Mr. YATES. Was it put on display—Smithsonian viewing before it went on the SITES tour?

Mr. PERROT. In this particular case, it was not. No. It went directly to Chicago from France. The organizing costs were assumed by the French Government and we are picking up the expenses of circulation in this country which will be recovered by the rental fee.

Mr. YATES. Are your exhibits from foreign countries covered under the Government Endemnity Act, too?

Mr. PERROT. At the present time, none of our exhibitions have been of an extent or size to warrant this. Also, we were not, theoretically, clear as to whether or not we would be included under that statute. And, there is a new authority that is being used for indemnification. We are being specifically written into the legislation.

STATUTORY AUTHORITY REGARDING EXCHANGES

Mr. YATES. Judge Powers shows pain about that.

Mr. POWERS. We are perfectly eligible under the statute, but the statute ties only to exchanges. The exhibits that SITES runs are not part of an exchange.

Mr. RIPLEY. They are one way.

Mr. YATES. Yes, but wait a moment. When the National Gallery imports its paintings from the Hermitage in Russia, is there an exchange going back to Russia?

Mr. PERROT. There is a cultural agreement with the USSR.

Mr. YATES. And, that only applies to exchange?

Mr. PERROT. I don't believe that that is quite——

Mr. YATES. I think the appellate court has just reversed the judge.

Mr. POWER. Indemnification is available for any exhibition coming in. It is available also in rare cases for exhibitions going abroad if they are part of an exchange.

INSURANCE FOR EXHIBITIONS

Mr. YATES. Okay. Now, what happens to the Sevres collection. Is that covered when it is imported from France? Suppose a couple of pieces are broken.

Mr. PERROT. That is covered by insurance.

Mr. YATES. Do you take out insurance on this? What would be the cost of covering that by insurance?

Mr. PERROT. I do not have the figure, Mr. Chairman, but I would be glad to submit it for the Committee files.

Mr. YATES. I wish you would. Because I don't know why you don't cover it by the indemnity agreement?

Mr. RIPLEY. It seems silly. I suppose the idea was that this would only be for very, very expensive shows.

Mr. PERROT. There is a ceiling of 250 million which is to be extended to 350 million, and there is a sizable deductible clause which would make it inappropriate for the smaller exhibitions that SITES circulates. However, for Sevres, it would have been possible to do so.

VALUE OF TRAVELING EXHIBITS

Mr. YATES. How valuable are your SITES exhibits? How valuable is your most valuable SITES exhibit that goes to our neighbors?

Mr. RIPLEY. They vary completely.

Mr. YATES. I know they do. But, I just wonder how valuable your most valuable ones are. Which would you consider your most valuable one in terms of monetary value?

Mr. PERROT. I would like to submit that for the Committee files, Mr. Chairman.

Mr. YATES. Please do.

VALUABLE TRAVELING EXHIBITS

Mr. RIPLEY. If we have the Korean show here——

Mr. PERROT. That would not be SITES. There is a Ban Chiang exhibition. I suppose that would be among the valuable ones.

EXHIBITS CIRCULATED

Mr. YATES. Okay, here we are. 20th century sculptors and their Drawings. One of them is an Archipenko. Seated Black Torso. So you send Archipenko out on tour. All right.

Selections for Exhibition made by Cynthia Jaffee McCabe, Curator of Exhibitions at the Hirshhorn. And, they are shown at Lyndon Baines Johnson Library, Austin, Texas, the Greenville County Museum of Art and included are a gouache and a steel mobile by Alexander Calder, not too expensive. An ink and pencil study by Jacques Lipschitz and his 1926 bronze, still not up in the price of the Gonzales. "Standing Woman with Guitar," a delicate pencil drawing by Matisse. Now, we are getting there. "Lisette," (Persian Woman) contrasted with the bold, abstract "Venus in a Shell II," also by Matisse. Among the other artists represented are Archipenko, Ernst, Grossman, Nadelman, Marini, and Zuñiga.

Okay, now, the fee for that is \$5,000. If somebody wants to pay that, they can get the SITES exhibit. Right?

Mr. PERROT. Yes, you have to provide high security.

Mr. YATES. What would high security be?

Mr. PERROT. Round the clock security, proper environmental controls, locked cases, guards on duty in the gallery when the gallery is open. Provisions of that kind which are all listed in the SITES handbook "Update" which you have.

Mr. YATES. Have you ever lost any of the SITES materials?

Mr. PERROT. There have been a few thefts, Mr. Chairman. Some have been recovered and some are still pending solution.

Mr. YATES. Now, here is the Phillips Collection in the Making.

Mr. PERROT. That would probably be one of the most valuable on the road at the present.

Mr. YATES. Wow. The fee for showing this is \$15,000. And, here is an exhibition that goes back to Duncan Phillips, and you have Bonnard, Corot, Daumier, Braque, Klee, Davies, Ryder, Dove, Demuth, Sheeler, O'Keefe, Marin, Knaths, Tack, and others. Very impressive, and that would be an extensive collection. If something happened to that—

Mr. PERROT. In the six figures, I'm sure it is insured and special arrangements were made for packing it under curatorial supervision.

Mr. YATES. Is that insured?

Mr. PERROT. That is insured.

Mr. RIPLEY. That has to be insured.

Mr. YATES. Do you pay the insurance?

Mr. PERROT. The insurance is paid and recovered from the rental fee.

Mr. RIPLEY. It is paid out of the fee.

Mr. YATES. Okay. When you send it out on the road do you know how many places it is going?

Mr. PERROT. Yes, Mr. Chairman. We generally try to make a survey of the market, as it were, before an exhibition is announced. And, then we establish a schedule. In this case, I believe, the schedule was entirely filled up long before the exhibition was even ready to be circulated.

Mr. YATES. So that you are covered. Who takes the insurance out? Does the exhibitor, or do you?

Mr. PERROT. We have a Risk Management Office, Mr. Chairman, that takes care of such matters and they are reimbursed from the fee that we receive for the rental.

NATIONAL MUSEUM ACT

Mr. YATES. All right. The National Museum Act. You provide services under the National Museum Act to various museums, don't you?

Mr. PERROT. We provide services relating to enhancement of the profession by training and research in museum management. Activities of that kind.

MUSEUM SUPPORT CENTER EQUIPMENT

Mr. YATES. Where is your equipment for the Museum Support Center going to be received and stored while the Center is under construction? You said before that it won't be received until you are you are ready to receive it in—

Mr. PERROT. It won't be produced until we are ready to receive it and then it will be delivered directly to the site. May I say, Mr. Chairman, that this is a most pressing, urgent need.

Mr. YATES. What is?

Mr. PERROT. This equipment for the Support Center.

Mr. YATES. The Committee will take appropriate note of your admonition.

Mr. PERROT. I am grateful for this committee's kindness.

Mr. YATES. We haven't been kind, yet, Paul.

Mr. PERROT. I'm trusting.

Mr. YATES. Trusting soul. Well, I should think you have been here long enough to know that you should never trust a Congressional committee.

Mr. PERROT. I don't have that much grey hair, yet, Mr. Chairman.

Mr. YATES. You are getting there, Paul.

Mr. YATES. Okay. International and Environmental Science Program. I think we are through with you, Paul, aren't we? Not through with you, but through with that portion of the budget.

Oh, have your guards been hired for the Office of Protection Services? Office of Protection Services, is that yours, Paul?

Mr. PERROT. No, it isn't, Mr. Chairman. It's Mr. Peyton.

OFFICE OF PROTECTION SERVICES

Mr. YATES. You received funds in 1980 for additional security guards for the Office of Protection Services. Have they been hired?

Mr. PEYTON. Yes, they certainly have.

Mr. YATES. They have. That's fine. Any problems with guards? Is there a need for guards?

Mr. PEYTON. We have a request in this particular budget for some additional guards.

Mr. YATES. Why do you need them?

Mr. PEYTON. We have surveyed our guard requirements, and we feel that we do not have enough to meet all of our requirements based on acceptable risk and we have a request in this particular budget for eight guard positions.

Mr. YATES. Eight additional guards. Will they be for the museums?

Mr. PEYTON. Yes, sir. Three specific museums are presently judged to be short.

Mr. YATES. Well, maybe we ought not to put it on the record. Right?

SMITHSONIAN INSTITUTION SERVICE CENTER

What is the Smithsonian Institution Service Center?

Mr. RIPLEY. It is a building that we rent on North Capitol Street where a number of services are performed in the way of developing of exhibitions, supplies. We have a picture of it here, Mr. Chairman. It's just out North Capitol beyond the Post Office. Duplicating, and the International Exchange Service is there. We service the Press Distribution, the Smithsonian Press. Archives of American Art. A lot of the question of duplicating and servicing of mail and also arranging of certain exhibitions goes on there.

VISITS OF CELEBRITIES

Mr. YATES. How do you pay for visits of celebrities? For example, a few years ago you were visited by the Emperor and Empress of Japan. And, you entertained them. Are you able to obtain funds for this from corporations as you do for some of your dinners? Or, is this something out of appropriated funds?

Mr. RIPLEY. No, my impression, Mr. Chairman, was that the Japanese actually funded that dinner themselves. I know that all

the tableware and things of that sort were flown in from Japan so that when the President, Mr. Ford, came and ate off the plates, they were Japanese plates brought from Tokyo. This has happened in the past with other state occasions, state dinners. I know that when the French President came during the bicentennial, the French Embassy dinner service, all of that sort of thing, was prepared and flown over from France. So that my impression was that we simply served as a temporary host, but we were not——

Mr. YATES. But there were no expenses incurred by the Smithsonian?

Mr. RIPLEY. There might have been some overtime for guards, but they were written off.

Mr. YATES. What about the visit of the Pope?

Mr. RIPLEY. The visit of the Pope did not consist of any expenditures by us. We moved some paintings of prominent, eminent Catholic religious figures from the Portrait Gallery over and had a temporary exhibit of about six or seven paintings, but the committee under the Archdiocese arranged all the expenses in connection with the Pope's visit.

Mr. YATES. Arranged for payment of these expenditures?

Mr. RIPLEY. They had a huge sort of theater-like podium that was built outside. The only thing that we had to do for the Pope was to let him into the building, to be robed, and provide the offices and so on that were open on Sunday.

Mr. PEYTON. And, because of the increased crowds and our facilities being around the periphery, we had to provide for that through having more of our custodial people on duty and more guard personnel, so we did incur approximately \$60,000 in additional costs all related to keeping our facilities open and in proper operating condition.

Mr. RIPLEY. That was in anticipation of an enormous visitation of people on that day.

Mr. YATES. And, it was a very, very cold day.

Mr. RIPLEY. It was a cold day. I know, I was sitting out there. It was terrible.

Mr. YATES. Well, you should have been warm. You wore your robe and your hat.

Mr. RIPLEY. No, I didn't. Not outside.

Mr. YATES. Didn't you? I saw you on television greeting him in a robe.

Mr. RIPLEY. I said hello at the door, and then took my robe off and went outside.

Mr. YATES. Did you say it in English or Italian? Or Latin?

Mr. RIPLEY. I said everything in English and he said everything back to me in English.

Mr. PEYTON. Mr. Ripley, we also had \$15,000 in trust fund costs that were an extension of the Folklife Festival that was physically moved over onto our part of the Mall area. This was done to accommodate the musicians and other people that were involved in the pre-Mass entertainment.

Mr. RIPLEY. They had to be moved from one place to another.

Mr. PEYTON. Yes, sir.

SMITHSONIAN FELLOWSHIPS

Mr. YATES. Let's turn to page 134. Tell us about your fellowships. How does somebody win a fellowship at Smithsonian? How many do you give out?

Mr. CHALLINOR. I can answer that, Mr. Chairman. We have about 85 different fellowships, primarily pre- and post-doctoral students who apply once a year. These proposals are then reviewed. We get several hundred applicants and we award somewhere in the neighborhood of 80. This varies from year to year. Recently, that is what we have awarded in all different departments and museums of the Smithsonian. People come here as pre-doctoral fellows to do work on their doctoral dissertations under various curators and scholars of the Smithsonian and they receive credit toward an advanced degree from their own educational institution.

Post-doctoral applicants, those successful ones, carry on research that they have been doing in cooperation with our own scientists and scholars and this usually results in a publication on the part of these post-doctoral fellows. It is a highly competitive program and covers applicants from virtually all countries of the world.

Mr. YATES. What happens to the publications?

Mr. CHALLINOR. These publications, at least in the sciences, appear generally in the recognized scientific journals that are distributed within the discipline.

Mr. YATES. What about the non-scientific ones? Do you have non-scientific fellowships?

Mr. CHALLINOR. Yes, we do.

Mr. YATES. In what? The art museums?

Mr. CHALLINOR. In the art museums we do, yes.

Mr. YATES. What happens. Do they prepare treatises?

Mr. CHALLINOR. I expect that I would have to defer this to my colleague, Mr. Blitzer, who could answer that question.

Mr. YATES. Well, we will defer it to Mr. Blitzer.

Mr. BLITZER. These are pre-doctoral ones who are working on their dissertations, generally, which may or may not be published. Post-doctoral ones are, just like the scientists, published in the professional journals.

Mr. YATES. Does anybody read their papers? Is this something Lerner does for Hirshhorn?

Mr. BLITZER. I think the directors or curators of the museums in which they spend their time keep track of their publications, certainly. We have, I might say, a very distinguished group of alumni, as it were, from these programs. I'm sure in all fields. I know that we do in art. The museums all over America are staffed by people who have this kind of training.

FUNDING OF FELLOWSHIPS

Mr. YATES. How do you fund these? Out of your own money, or out of federal money?

Mr. CHALLINOR. The fellowships, Mr. Chairman, as of last year are now financed out of trust funds. The actual fellowship awards.

Mr. YATES. Doesn't the federal government participate at all in this program?

Mr. CHALLINOR. Mr. Blitzer might explain it.

Mr. BLITZER. Your problem, Mr. Chairman, is that this morning we talked about the National Collection of Fine Arts request for funds for two additional fellows. This central program has been for two years funded by Smithsonian trust funds. What happens at the National Collection is that Dr. Taylor takes such an intense interest in his program of education and training that he has chosen to request federal funds to add to it more. These are people who go through this same process and are chosen by the same committees, but if they meet his standards he would like the money to support more than can be supported by the central program. I should emphasize, lest there be any misunderstanding, that this, in no way, is backing down from our commitment to fund this program. In fact, the trust funding of it has gone up from about \$440,000 to \$600,000. This is simply adding on to it.

EXHIBIT PLANNING

Mr. YATES. How do your museums decide on their exhibits? And how expensive they will be? Who approves the budget for them? Do you, Mr. Blitzer?

Mr. BLITZER. No, sir. You do, more than I do. The museum has a budget with which to work for a year and it comes under the various object classes.

Mr. YATES. Let's see, in your explanation. I am looking at page A-139 in the major exhibitions program. Would it not be in here? It discusses the George Washington exhibit, and the Renwick exhibit, and other exhibits. I don't see any reference to the museum exhibits.

Mr. BLITZER. As you will see, Mr. Chairman, on page A-140, it points out that the Museum of History and Technology has in its base non-salary funds of \$225,000 for exhibits, which is just about enough to keep its existing exhibits refurbished and to do an occasional small one, which is why we are asking for this special program. But, basically the director and the special staff of each museum makes up exhibit plans several years in advance. It takes years to do.

Mr. YATES. And, you approve them? Who approves them?

Mr. BLITZER. No.

Mr. YATES. The Board of Trustees?

Mr. BLITZER. If there is a board that has that power, it does. Otherwise, simply the director and his staff do it. We look at them periodically and perhaps make comments, but not every exhibit has to come to me.

Mr. YATES. Is he limited as to the amount of funds that are made available to him?

Mr. BLITZER. By the appropriation he is, yes, sir.

Mr. RIPLEY. Yes, he has an exhibit budget within which he has to live. Unless it is a special appropriation that has been requested, or unless there has been a program of raising funds, as for example, we described the Maritime Hall and the private funds obtained—

Mr. YATES. Yes. Well, we take page A-141. It says, "In short, the Institution's history and art museums especially the National Museum of History and Technology have a critical need for a long-term program." "Have a critical need for a long-term program

which can selectively augment their available base funding in order to produce large, new exhibitions. The Major Exhibition Program proposed here will fill further this need. Administered centrally by the Assistant for History and Art, annual funds will be justified to the Congress for specific exhibitions—usually two per year, one at the MNHT and another which will call into play the cooperative forces of two or more Smithsonian museums in joint venture. So structured, the program will avoid permanent base increases to any museum's budget, retaining flexibility for varying allocations based on merit and need and provide for direct and continuing Congressional oversight." How much money is in the budget for this? For these exhibits in various museums? Do you know? There is a million for the George Washington exhibit and the "Celebration" show at the Renwick.

Mr. BLITZER. The "Celebration" exhibit.

Mr. YATES. Yes, those two have a million dollar program. But what about the Hirshhorn and the others?

Mr. BLITZER. Mr. Yellin can give you the functional breakdown.

Mr. YELLIN. The total for the Institution. I don't have the individual museum exhibits, Mr. Chairman. We have approximately 10 million dollars for exhibitions. Approximately 85 percent, I would guess, would be salary-related costs, and the remaining million and a half or so for non-salary costs associated with exhibitions.

Mr. YATES. I see. Salary costs—including the Exhibits' Central.

Mr. YELLIN. Exhibits Central, the curators' costs, the maintenance people associated with the exhibits, and so forth.

Mr. YATES. Protection services. We have already found out that we have got to give them more money in order to protect them. Special Foreign Currency Program. We discussed that yesterday. How badly were you hurt by OMB?

OFFICE OF MANAGEMENT AND BUDGET CUTS

Mr. RIPLEY. We have the figures there, Mr. Chairman.

Mr. YATES. Were you hurt by OMB? Or were they generous to you? Is that an improper question?

Mr. YELLIN. I think that they were very fair with us. There were selective cuts that OMB made, but for 1981 they did follow our priorities.

Mr. YATES. They did?

Mr. YELLIN. They did.

Mr. YATES. How much did they cut?

Mr. YELLIN. In all appropriations, including the foreign currency appropriations, about 15 million dollars.

Mr. YATES. \$15 million. And, where were the cuts?

Mr. YELLIN. The cuts were approximately 4 million dollars in the S & E appropriation.

Mr. YATES. Was that S & E appropriation related to the new support staff?

Mr. YELLIN. No, sir, except for a very small amount of equipment money.

Mr. YATES. That is 4 million dollars.

Mr. YELLIN. Approximately a million and a half to two million dollars related to the R & R account.

Mr. YATES. What is R & R? Relief and rehabilitation?

Mr. YELLIN. Restoration and renovation of buildings. They cut us about five and a half million dollars for the Zoo construction program. This particular project, and Dr. Reed can speak to it, it would be a high priority in next year's request.

Mr. YATES. Well, we will let him speak next year, then.

Mr. YELLIN. And, we did receive a cut to our Foreign Currency Program request, essentially based on our request, essentially based upon the Moenjodaro situation.

Mr. YATES. Yes, they cut \$4 million dollars science research, wasn't it? Well, that is because it was the biggest program. Well, science wasn't hurt very much. Science is never hurt, is it, Mr. Challinor? Wringing it out from facilities services. Restoration and renovation of buildings. We were cut by approximately a million and a half there. That's not so bad. South Quadrangle. They cut you from a million two fifty to \$500,000. Somebody up there must have been listening to me. Right?

SOUTH QUADRANGLE BUDGET REQUEST

Mr. RIPLEY. Not that we know of, Mr. Chairman, but they may have heard vague reflections. We felt we could live with \$500,000 because that is in effect a matching sum.

Mr. YATES. Why did you ask for a million two fifty?

Mr. RIPLEY. Because the second phase—you see this budget having been prepared at a stage when we were not complete with the previous year's budget in which we had asked for \$500,000, the second phase to complete the planning is based on the estimated total cost which would have been \$2,500,000. Of which one half would have been \$1,250,000.

The first phase not having been granted until after we had prepared this submission to OMB for the next year's cycle, you will recall, the bill was very slow in being totally passed this year. It would have been that, so in effect we are back to first base, as it were, as it if were the previous year.

RESTORATION AND RENOVATION OF BUILDINGS

Mr. YATES. All right, let's talk about the restorations for a moment. Two years ago, I think you came in and told us that Renwick was in bad shape and that you had to replace the facade. How is that work going on?

Mr. PEYTON. Mr. Chairman, we have just about completed taking measured drawings of all the details in the building and we have been holding discussions with the Commission on Fine Arts. Last year at this hearing, and immediately subsequent to that in communications to the Committee, we indicated that we would be attempting a more inexpensive approach to replacing the facade by using pre-cast concrete instead of the stone which, unfortunately, is only available in western Europe. And, of course, at a much higher price. The total price that we are looking at at this particular time is 3.4 million versus the larger number that was discussed last year. We expect to award some test contracts within the next two months which we will then take to the Commission on Fine Arts and allow them to examine these pre-cast samples to see whether

they agree with us that this approval is feasible. We have had an expression of reservation from the Chairman of the Commission. However, I believe that we are on the right track. The Chairman feels that we ought to have the original stone no matter what the cost, and we—

Mr. YATES. Who feels?

Mr. RIPLEY. The Chairman of the Fine Arts Commission, feels that we ought to have the original stone no matter what the cost because it is esthetically more satisfactory when you look at it. Somehow or other, he can tell at a distance of 90 feet whether it is a cast stone or a real stone. I'm not sure that I would agree with him on this.

Mr. YATES. He has the example of the East Building before him.

Mr. RIPLEY. He has the example of the East Wing. We don't have all that money.

Mr. YATES. When nothing was spared.

Mr. RIPLEY. When nothing was spared, right.

Mr. YATES. Maybe you can get the difference from Mr. Mellon.

Mr. RIPLEY. I think he is not going to be woo-able.

ARTS AND INDUSTRIES BUILDING

Mr. YATES. A million dollars is requested for the Arts and Industries Building. What's the cost going to be of completing the exterior renovation? Do you know that yet?

Mr. PEYTON. We think that it will be necessary to come back again next year and ask for additional funds. That million is to do the second half of the roof which will complete that aspect of the work and the balance will be applied to replacing the wooden windows which have deteriorated badly, providing weather stripping and caulking and pointing up the masonry. We do believe that the money we have asked for this year will not do the entire job. We have an architect-engineer under contract now who is preparing a complete survey and just as soon as that is complete, I believe we will be in a position to know the final request.

NATIONAL AIR AND SPACE MUSEUM

Mr. YATES. The National Air and Space Museum. You want \$650,000 to begin a phased program of correcting deficiencies. What kind of deficiencies are you talking about?

Mr. PEYTON. We have some water leaks and condensation problems with the building. There is a coping around the base of the building that extends the entire perimeter of the building except where the glass is located. Rain water coming down, strikes the face of the building and is getting into the building over the top of this coping. It will be necessary to replace that.

Mr. YATES. Is it improper design by the architect?

Mr. PEYTON. I believe that it is, sir.

Mr. YATES. Is the architect willing to pay for it?

Mr. PEYTON. I don't believe that he is, sir.

Mr. YATES. Will this be considered an over-run for the cost of the building?

Mr. PEYTON. Well, it is conceivable that it will.

Mr. YATES. Well, there goes your record, doesn't it?

Mr. RIPLEY. Well, I hope it's not enough to overcome the favorable balance.

Mr. YATES. Well, as you know, for years the Smithsonian has been—as a matter of fact, in this hearing yesterday, you talked about meeting—I recall your testimony, you said that you had come within the budget figure.

Mr. RIPLEY. Well, I must say my face is red, actually at these leaks.

Mr. PEYTON. I seem to recall that there was an excess balance that was turned over the exhibits. So maybe by the time the bottom is struck it will be even.

HIRSHHORN FACADE

Mr. YATES. Okay. Tell us about the Hirshhorn now. A couple of years ago there were some kind of water leaks coming through the walls of the Hirshhorn.

Mr. PEYTON. Yes, sir.

Mr. YATES. And, you were attempting to obtain repayment from the contractor, I think. Was that successful or unsuccessful?

Mr. PEYTON. That was unsuccessful. It is my understanding that the litigation between the General Services Administration who was the contracting party for government and the contractor has now been resolved by the GSA Board of Contract Appeals and we did not collect on that particular issue.

Mr. YATES. Has that been completed. Have the repairs been completed?

Mr. PEYTON. No, sir. It has not.

Mr. YATES. What will the cost be?

Mr. PEYTON. I don't really think we know.

Mr. YATES. Have you any ball park figures?

Mr. PEYTON. It is conceivable that it could be in the \$500,000 category.

Mr. YATES. Hum. That much. What do you have to do?

Mr. PEYTON. One of the problems on that particular building is that there is an air space between the outer face, effectively the ornamental facade of the building, and the inner portion of the building which is the structural part which holds the building up. Warm moist air collects in there in the summer time, getting in from the outside, and strikes the cold structural face of the inner portion of the building that has been airconditioned. Condensation takes place and water runs down the structural face of the wall and seeks to find a way out.

Mr. YATES. What was the name of the architect?

Mr. PEYTON. Skidmore, Owings, and Merrill.

Mr. YATES. Bundshaft, is he aware of it?

Mr. PEYTON. Yes, sir, he is aware of it.

Mr. YATES. And, I suppose, he is sorry about it?

Mr. PEYTON. I haven't spoken with him, sir, but we have made our concerns known to the General Services Administration and last year at the hearings we put in the record an indication that we have done that. The matter is still unresolved.

Mr. RIPLEY. There is no way of draining out that water?

Mr. PEYTON. I was going to come to that.

Mr. RIPLEY. That is what we need to do.

Mr. YATES. What do you need to do?

Mr. RIPLEY. We need an internal drain system to drain this condensation out which is not provided in the original design.

Mr. PEYTON. With the funds that we received last year, we drilled some holes in a test section and installed small plastic tubes to allow that moisture to drain out.

Mr. YATES. How will this affect the design of the building?

Mr. PEYTON. Well, as you look up at the face you can see places where moisture has come down. The portion that has not been treated, is much more unsightly than the untested area.

REVIEW OF PREVIOUS TESTIMONY ON HIRSHHORN FACADE

Mr. YATES. Part nine of our hearings for 1980, page 402. Very interesting. Names of the contractor on Hirshhorn. Hirshhorn facade. Well, Judge Powers gave the responsibility over to the GSA. Have you talked to GSA? Mr. Powers. I have not myself. My understanding is that the time has passed for suing the contractor. GSA always says that, don't they? History of the Hirshhorn claims. After the Smithsonian took official occupancy of the Hirshhorn Museum in May 1974, the contracting officer of GSA discontinued sending the Institution weekly construction progress reports. GSA contracting officer has expressly confirmed that all possible recourse has been taken against the contractor pursuant to the contract including assessment for delayed damages. Because the contractor had performed according to the contractual requirements a final settlement was effective, and so forth.

I suppose it is not the contractor's fault, really, is it? Based on your testimony, it's really the architect's poor design.

Mr. PEYTON. In my opinion, yes. However, there is one additional complicating factor. And, that is, at the time that building was designed, the Smithsonian conservation approach had not been developed to a point where we were required to operate our buildings at a constant temperature and constant relative humidity of approximately 50 percent on a year round basis. A good deal of some of the condensation is a result of that particular requirement. So, one could say that we are a party to some of the problem.

Mr. YATES. One could say that. Probably the architect would say that.

Mr. PEYTON. No doubt.

Mr. YATES. Status of the claim against the architect, page 401. Following a review of the architect's role in preparing the specifications for the Hirshhorn Museum, GSA made a formal demand against the architect, Skidmore, Owens and Merrill, for \$1,430,393, on the basis of alleged negligence in design. This is the amount that was awarded by the GSA Board of Contract Appeals to the contractor resulting from the ambiguous specifications for a complicated scale model that was required to be built before any construction could begin. That must have been awful complicated for that sum of money, mustn't it? A million forty-three thousand dollars.

Mr. PEYTON. This particular thing that is being described there relates to three trunk-like underpinings of the building which, indeed, is rather unusual and——

Mr. YATES. The architect is contesting liability and it is expected that the issue will be in litigation for some time. Is it still in litigation?

Mr. PEYTON. As far as I know, it is.

Mr. YATES. Judge Powers shakes his head no.

Mr. POWERS. No, I don't know.

Mr. YATES. Were you just being sad about it?

Mr. POWERS. Yes.

Mr. YATES. Well, Mr. Ripley says that those cracks are very small and minor.

Mr. RIPLEY. That was a different subject. I was wearing my other hat. The cracks are different from the leaks.

MR. JAMESON'S TESTIMONY ON CONSTRUCTION

Mr. YATES. Last year we didn't have Mr. Peyton before us. We had Mr. Jameson, and Mr. Jameson testified about the Air and Space Museum. Did you have any problem as a result of GSA handling it? If we can stay on roofs and facades, the same problems exist at NASM and at History and Technology most of which have roof problems. I think new buildings and old buildings have problems. We have roof and facade problems really in every one of our buildings, which is why we have established a subaccount under the R&R. Does this mean that Mr. Perrot should have a special fund for the roofs and terraces of his facility? We haven't even built the facility. Mr. Jameson. We assume the Support Center is going to be very well designed and very well constructed at this point. Mr. Jameson, was this the assumption you made for the other buildings, too?

Mr. JAMESON. I wasn't so much involved in the other buildings. I will stand by that comment with regard to the Support Center.

Mr. YATES. Let the record show he stands by it.

Mr. PEYTON. I will stand beside him.

Mr. YATES. You stand beside it. Where is the firing squad? Does GSA answer? Is that a valid assumption, Mr. Jameson? I don't think that the fact that we have had some problems with these buildings should be taken as a blanket criticism of the architect or GSA. It just happens that the Kennedy Center was pretty much of an architectural and construction mess when it was finished. After ten years, we are still pouring four and a half million dollars into reconstruction of the walls, roofs, and terraces. That's a substantial amount. Maybe your troubles are just beginning with some of your museums. That was a prophetic statement, wasn't it? Mr. Jameson: That is why we feel so strongly about this restoration and renovation of building to come which I think is slightly misnamed. We are not just restoring and renovating old and new buildings for the building site, we are greatly concerned with the contents of those buildings and the need to maintain an adequate envelope for collections within those facilities.

You stand by that, too? All right, let the record show that Mr. Jameson stands by that.

How much do you say repairs for the Hirshhorn are? Mr. Jameson: \$165,000. That is what you said last year. Is that what you are saying this year?

Mr. PEYTON. That is how much money we were given.

Mr. YATES. Well, that is how much you asked for.

Mr. PEYTON. Yes, sir.

Mr. YATES. And, that wasn't enough, was it? How much more do you want?

Mr. PEYTON. We are not ready to ask for——

Mr. YATES. But, you know that it is going to be more than this.

Mr. PEYTON. Yes.

Mr. YATES. Well, let's see. This is put into the record after the hearing. "GSA managed construction of the Hirshhorn Museum and, in effect, Smithsonian was a client. The warranty for that construction expired some time ago. Since that time, superficial cracking in the facade of the structure has been observed, which led to some leaks and staining of the surface. Additional ceiling and installation and flashing in the roof were accomplished to correct these problems. We now found that that wasn't the problem. We are now seeking the services of an expert consultant to advise us on restoring the facade to its original appearance. Additional superficial cracks detected in the undersurface of the coffers were determined by both GSA and the Smithsonian engineers to be the result of settling rather than the latent defects in the construction of the building. These can be readily repaired by caulking and resurfacing, if necessary". Do you think Mr. Jameson wants to stand on that statement?

Mr. PEYTON. I'm not sure I heard the last, very last sentence.

Mr. YATES. "Additional superficial cracks detected in the undersurface of the coffers were detected by both GSA and Smithsonian engineers to be the result of settling rather than the latent defects in construction of the building. These can be readily repaired by caulking and resurfacing, if necessary."

Mr. PEYTON. By coffers, we are referring to the underneath portion, of course, where these large——

Mr. YATES. But, it isn't due to the settling, is it? It's due to the design? As I understood your previous testimony.

Mr. PEYTON. That is not an area that is currently bothering us. The area that is——

Mr. YATES. Will that bother you when you are through with this one?

Mr. PEYTON. No, sir, I don't believe so.

Mr. YATES. Okay. So you are willing to stand on that statement next year? What was it that former vice president Garner said when they asked him why he never put any statements into the Congressional Record? I won't say what he said. Anyway. He said, "would that my opponent would write a book."

Mr. JAMESON. I have information on the consultant fund if you would like us to provide it.

Mr. YATES. What you are telling me is that what you put in last year was not correct. It was just partly correct. You had to take much more extensively corrective measures.

Mr. JAMESON. I think it requires more than we suspected a year ago.

Mr. YATES. Are you willing to stand by that statement, too? Okay. It does require more. Each year it requires more, apparently. What are we going to do now? You are now consulting with respect to how to repair Hirshhorn and you don't know how much it will cost. Is that right?

SUMMARY OF CONDITION OF HIRSHHORN FACADE

Mr. PEYTON. I might summarize the situation, if I may. We have established a test area. We have drilled holes and have been able to drain the condensed water out through these tubes that have been inserted in the holes. This seems to be working. We now, with the money that you gave us last year, actually in the current fiscal year—\$165,000—we are going to place those holes all the way around the building. They are very small and quite difficult to see with the naked eye as you stand down below.

Mr. YATES. Now, are you doing this pursuant to the best advice that you can receive?

Mr. PEYTON. Yes, sir.

Mr. YATES. Or, is this just a temporary thing?

Mr. PEYTON. We have engaged a Dr. Seymour Lewin, Professor of Chemistry from New York University, who has assisted us on several consultation matters relating to construction material including the cleaning of the Carnegie Mansion in New York, which as you know as the Cooper-Hewitt, and he has assisted us also on the Renwick Gallery. He has come down periodically and examined this procedure as we have gone along and we will—

Mr. YATES. Why does a professor of chemistry come into this, on a question of condensation and its effect on material?

Mr. PEYTON. Yes, sir. Plus some of the streaking appears to be caused by deterioration of the caulking which fills the joints in between each of these pre-cast concrete sections surrounding the building. The problem being two-fold. Water that needs to be disposed of as well as the streaking appearance. We feel that we are on the right track. That does not solve, however, the matter of continued condensation on the inside between the faces of the building.

Mr. YATES. Is Dr. Lewin an expert on that, too? Or, do you have an architect or engineer? Who do you have on that one?

Mr. PEYTON. We will have an engineer on it. We do not at this point.

Mr. YATES. You don't have at the present time. What is the condition of your other buildings? We know about Air and Space. Is that the only defect discovered so far in Air and Space? Do you have other cracks, do you have other deteriorations?

Mr. PEYTON. We had some deterioration of the pay—

Mr. YATES. Okay, let's do this. In last year's hearing, page 407, you introduced into the record a physical plant condition report for each facility. Will you upgrade that?

Mr. PEYTON. Yes, sir, I will.

[The information follows:]

PHYSICAL PLANT CONDITION REPORT BY FACILITY

INTRODUCTION

This report provides an overview of Smithsonian's facilities and a summary of needs identified for the period FY 1981 - FY 1985 that are appropriate for funding under the Restoration and Renovation of Buildings Account. (Facilities of the National Zoological Park are excluded, as this information is presented separately in the Institution's budget submission.) The cost estimate for meeting these needs totals \$54.5 million and represents a preliminary update of the information provided in the Institution's Five Year Prospectus, FY 1981 - FY 1985.

ANACOSTIA NEIGHBORHOOD MUSEUM

The Exhibits Laboratory of the Anacostia Neighborhood Museum is located on Fort Stanton Park property and was constructed in 1976. The 11,000 sq. ft. building houses administrative, shop, storage and research activities. The Museum also leases a building used for exhibition and education programs and for additional administrative offices.

The Exhibits Laboratory building is in good condition. Some additional fire protection is required, and the drive and parking area must be paved.

These requirements are estimated to cost \$.1 million.

ARTS AND INDUSTRIES BUILDING

The Arts and Industries Building, constructed between 1879 and 1881, contains more than 140,000 net sq. ft. of exhibition, staff and storage space. The most recent restoration and renovation of the interior and entrances was completed for the Bicentennial Celebration. Additionally, about 50 percent of the roof was replaced, and selected facade repairs were accomplished in the most deteriorated areas.

The continued renovation of the roof and exterior is required to ensure watertightness and energy efficiency. Remaining work includes completion of the roof replacement; replacement of gutters and downspouts; extensive repairs and replacements of window components; and repointing and recaulking. Interior painting and repairs are required as a result of damage caused by water intrusion. Alterations of the building's heating, ventilating and air conditioning systems are required to establish control over temperature and humidity conditions. Planned improvements include the installation of an energy-conserving system to help regulate temperatures; the addition of reheat coils; the modification of controls on air handling units; the addition of new steam humidifiers; and the relocation of unsightly roof-mounted mechanical equipment. Other needed projects in the utility systems category include the renovation of electrical wiring; removal of abandoned electrical and plumbing conduits; and replacement of the cooling tower. Additional smoke detection and sprinkler suppression system are required as well as a master plan to develop a program of space-use improvements in staff and public areas.

These and other requirements are estimated to cost \$5.2 million.

CHESAPEAKE BAY CENTER FOR ENVIRONMENTAL STUDIES

The Chesapeake Bay Center was established in 1965 on the Rhode River, a subestuary of the Chesapeake Bay. Current facilities, which support the Center's research program and which are located on 1800 acres acquired since 1963, include a renovated dairy barn with a new laboratory wing addition; an education and dormitory building; several small farm buildings; and several trailers. Construction of a maintenance building is scheduled to begin in FY 1980.

Plans for the Center's phased facilities improvement call for upgrading the water supply and distribution system so that it can support a needed fire suppression sprinkler system; adding space for research and administrative activities; renovating an existing barn to provide additional dormitory space; and improving the roads. At Poplar and Jefferson Islands, the shoreline has eroded, but it is unlikely that large-scale erosion control will be economically feasible.

These requirements are estimated to cost \$3.0 million.

COOPER-HEWITT MUSEUM

The Cooper-Hewitt Museum, acquired by the Smithsonian in 1968, is housed in the Carnegie Mansion and the adjoining Miller House in New York City. The two buildings, set within a fenced garden, were donated to the Institution by the Carnegie Corporation.

Built in 1901, the 64-room Mansion was renovated with trust funds in the early 1970's and opened to the public in 1976. Requirements of the Mansion include walkway repairs, heating, ventilating and air conditioning improvements, basement waterproofing and other space improvements.

The Miller House must be completely renovated within the next two to five years, and the Institution will seek trust fund support for this purpose. When completed, Miller House will contain modern exhibit galleries, classrooms, an auditorium, and other education facilities along with badly needed storage, shipping and office spaces. The galleries in the Carnegie Mansion will then be turned over to the exhibition of permanent collections.

Requirements for the continuing upgrading of the Carnegie Mansion are estimated to cost \$.5 million, and renovation of the Miller House an estimated \$5 million (trust funds.)

FINE ARTS AND PORTRAIT GALLERIES BUILDING

The old Patent Office Building, constructed between 1836 and 1866, was transferred by the General Services Administration to the Smithsonian in 1958. The building was renovated from 1965-68 and currently houses the National Collection of Fine Arts, the National Portrait Gallery and the Archives of American Art, providing approximately 250,000 net sq. ft. of space for exhibitions, collections storage, staff activities and a garage.

Much work remains to be accomplished to preserve the building envelope and to protect the collections housed there. Completion of the roof replacement and extensive recaulking and repointing are required. The heating, ventilating and air conditioning systems

require a major upgrading to correct existing deficiencies and to improve environmental control and energy efficiency. Additionally, conversion of the parking garage is needed to meet space requirements for museum purposes.

These and other requirements are estimated to cost \$6.0 million.

FREER GALLERY OF ART

The Freer Gallery, constructed between 1916 and 1921 and opened to the public in 1923, provides 68,000 net sq. ft. of exhibition, staff and collections storage space.

A major renovation of the building's heating, ventilating and air conditioning systems is required, and most existing equipment must be replaced. Deteriorated electrical wiring also must be replaced and upgraded. The installation of additional smoke detectors is required as well as the installation of fire suppression equipment in selected areas of the building. Skylight repairs are needed to prevent water intrusion, lighting improvements are planned, and access for the disabled into and within the building must be improved significantly. Additionally, plans call for enclosing the central open courtyard and providing additional underground space for museum purposes beneath the courtyard. A connection with the proposed Quadrangle facility will be provided.

These and other requirements are estimated to cost \$4.7 million.

HIRSHHORN MUSEUM AND SCULPTURE GARDEN

The Hirshhorn Museum and Sculpture Garden opened to the public in 1974, offers 226,000 net sq. ft. of exhibition, staff and collections storage space.

Two projects that are underway and which must be completed include modifications to the Sculpture Garden to provide access for the disabled and facade repairs necessary to eliminate staining and leaking and to correct original deficiencies. The Museum's plaza surface is deteriorating and will need to be replaced with a more stable and durable material within the next several years. Other planned projects include electrical system improvements, enclosure of the second floor balcony and design for the proposed expansion of the lobby.

These requirements are estimated to cost \$2.2 million.

MUSEUM OF AFRICAN ART

Located on Capitol Hill in Washington, the Museum of African Art occupies the historic Frederick Douglass House, eight contiguous townhouses and several other structures.

The Museum's buildings are in need of upgrading in order to assure that they meet minimum standards for fire protection, safety and handicapped accessibility, and these improvements will be accomplished with funds appropriated in FY 1980. Until the Museum can be relocated to the Quadrangle, an amount of approximately \$50,000 per year will be required for essential repairs and maintenance, including such items as roof repairs; plumbing, heating and cooling system repairs; and electrical servicing.

MUSEUM OF HISTORY AND TECHNOLOGY

The Museum of History and Technology opened to the public in 1964 and contains approximately 513,000 net sq. ft. of exhibition, staff and collections storage space.

Although fundamentally sound, the building requires major upgradings of its fire detection and suppression systems and of its heating, ventilating and air conditioning (HVAC) systems. A fire protection master plan is under development and will provide a phased implementation program for correcting deficiencies in this area. Major HVAC improvements are needed, including the replacement of water pumps, motor control centers, air conditioning units and the HVAC control system; repair of the main cooling tower; and improvements to the air filtration system. These and other improvements will result in substantial energy savings, greater environmental control for the protection of the collections and improved operating efficiency. Projects planned for the preservation of the building envelope include finishing the terrace renovation, recaulking the facade and replacing the roof. Additional modifications are required to improve access for the disabled, and the public address system needs to be upgraded to provide added protection in case of emergencies. A suitable replacement for the shade structures on the Mall terrace (which were removed as a safety hazard) and an energy-efficient alternative to the north entrance fountain are required.

These and other requirements are estimated to cost \$7.9 million.

MUSEUM OF NATURAL HISTORY

The Natural History Museum was completed in 1911 and identical east and west wings were added in 1963 and 1965. In 1975, an interior court was filled in at three levels to create additional space primarily for public use, bringing the total building area to 1,000,000 net sq. ft.

The most important requirement of the building is continuation of the phased installation of fire detection and suppression systems; the fire protection program, which also includes related architectural modifications, will continue steadily over the next five years. In the utility systems category, heating, ventilating and air conditioning improvements are required in order to achieve energy conservation, to control temperatures and humidity, and to improve air circulation. Some of the projects planned in this category include a study of existing conditions and design for improvements, repair of the main cooling tower, and replacement of the HVAC control system and air handlers. Electrical and plumbing renovations are required in the attics and tunnels to replace deteriorated equipment and to remove equipment that is no longer used, and transformers must be replaced. Projects needed to protect the building envelope, some of which would also improve energy efficiency, include repointing and recaulking, replacement of window locks and gaskets, and reglazing and repair of windows. Modifications of space for exhibition purposes are planned, as well as modifications to improve accessibility for the disabled in staff and public areas.

These and other requirements are estimated to cost \$6.3 million.

NATIONAL AIR AND SPACE MUSEUM

The National Air and Space Museum opened to the public in 1976, providing approximately 500,000 net square feet of exhibition, staff and support space, including a parking garage.

The building's facade and terrace require a major program of repairs and improvements primarily in order to eliminate water leaks and intrusions. Corrective facade work is expected to include recaulking, repair of some of the marble stone and flashing, re-insulation of ductwork, and waterproofing of coping. Leaks are evident at all drains on the terrace and the pavers have cracked, chipped and settled as a result of heavy pedestrian traffic and weathering. Renovation of the terrace is expected to include reconstructing the waterproof membrane, upgrading other subsurface materials and replacing the existing pavers with a more durable material. The building's electrical transformers are currently operating at near capacity, and some reserve power is needed. Improved access for the disabled is required in restrooms and exhibit areas, and additional offices must be constructed to provide needed staff space.

These and other requirements are estimated to cost \$4.4 million.

RADIATION BIOLOGY LABORATORY

By the year 1990 it may be necessary to acquire appropriate new quarters for the Radiation Biology Laboratory, currently located in leased space in Rockville, Maryland. An amount of \$50,000 is required to begin relocation planning, including a study of the Laboratory's long-range requirements and an exploration of alternative sites.

RENNICK GALLERY OF ART

The Renwick Gallery building was constructed between 1859 and 1874 and was originally designed to house the Corcoran Gallery of Art. In 1897, the Corcoran moved to its current location, and the building was purchased by the Government and later transferred to the Smithsonian in 1965 for restoration to its original purpose as an art museum.

Renovation of the deteriorated facade is the building's major requirement. Precast concrete has been selected as a replacement for the existing natural stone and is expected to produce a facade of acceptable quality and durability. Repairs to the roof and windows also are anticipated. The building's mechanical systems are generally in good condition, although routine maintenance and replacements are planned, as well as the installation of an emergency generator and improved security systems for the protection of artifacts.

These requirements are estimated to cost \$2.7 million.

SMITHSONIAN ASTROPHYSICAL OBSERVATORY - MT. HOPKINS, ARIZONA

Dedicated in 1968, the Mt. Hopkins Observatory is located on 390 acres, buffered by an additional 4,350 acres of National Forest Service land. Mountain facilities include the Multiple Mirror Telescope, other telescope observation and support structures, dormitory/dining facilities and water storage facilities. Additional support

and administrative activities, which comprise the base complex, currently are located in leased space about twenty miles from the mountain facilities.

Of utmost importance is the continued improvement and maintenance of the hazardous, single-lane access road built in 1967. Required improvements include insloping, realignment, drainage, paving and widening of some sections of the road. Additional plans call for development of new base complex facilities in order to relocate those functions that are now housed in leased space. These needs include facilities for vehicle maintenance, parking, administrative and technical support offices, public information and warehousing and storage. (Although the current base complex lease expires in June 1982, it may be possible to extend it; if so, the need for relocating to a new area will be obviated for the near future.)

These requirements are estimated to cost \$4.0 million.

SMITHSONIAN INSTITUTION BUILDING

The Smithsonian Institution Building, which was constructed from 1847 to 1855, provides 55,000 net sq. ft. of exhibition and staff space. Currently, the building requires additional fire protection; completion of the smoke detection installation scheduled for FY 1981 will meet the major portion of the building's needs in this area. Planning is underway to provide accessibility for the disabled on the building's Mall side. Other major needs include renovation of the electrical wiring and alterations to improve the efficiency of space-use in the basement.

These requirements are estimated to cost \$.5 million.

SMITHSONIAN TROPICAL RESEARCH INSTITUTE

Facilities of the Smithsonian Tropical Research Institute in Panama are located at Barro Colorado Island (BCI), Galeta Point, Balboa (Ancon and Tivoli sites) and Naos Island. Some 50 structures scattered throughout 17,600 acres of land provide the base for tropical marine and terrestrial environmental research.

Many of the buildings and their operating systems are deteriorated and inadequate. Existing buildings must be upgraded, where possible, and the construction of new facilities is required to provide safe and efficient space for the Institute's activities. Major requirements at BCI include construction of a new dormitory and kitchen/dining facility, repairs or replacements of materials storage sheds, waterfront repairs and the installation of a fire protection system. At the Tivoli site, construction of facilities to house a new library, laboratories and conference room is required to allow for relocation of activities currently housed in the Ancon Building. Requirements at Naos Island include modifications of an existing building to provide space for the Coral Ecology Laboratory and miscellaneous repairs. Sewage and electrical systems at Galeta Point must be upgraded and additional laboratory space is needed.

These and other requirements are estimated to cost \$2.6 million.

SILVER HILL FACILITY

Property and facilities have been acquired and constructed at Suitland, Maryland to provide collections storage, conservation, restoration and exhibits support space principally to the Mall

museum operations of the National Air and Space Museum, Museum of Natural History and the Museum of History and Technology. Twenty-five pre-engineered metal buildings and several other structures located on twenty-one acres serve these purposes. The floor area of these buildings is approximately 312,000 sq. ft. An adjacent 82 acres is the site for the new Museum Support Center.

Steady progress has been made toward providing adequate fire protection for the Silver Hill buildings, and the continued installation of detection and suppression systems is required. Environmental control is required in some of the buildings used for the storage and conservation of collections, and electrical service must be improved. All of the buildings require a regular program of roof maintenance to prevent water leaks. Improvements to provide more adequate work and storage areas are required, the perimeter security fence must be repaired and the building exteriors must be painted.

These and other requirements are estimated to cost \$1.1 million.

MISCELLANEOUS PROJECTS

Additional major requirements for the Institution's facilities include the containment or removal of exposed asbestos insulation at the Silver Hill Facility, Fine Arts and Portrait Galleries Building, Arts and Industries Building, and the museums of History and Technology and Natural History; energy audits for all buildings; security lighting for Mall buildings; and a yearly allowance for emergency repairs.

These requirements are estimated to cost \$3.0 million.

BUILDING CONDITIONS

Mr. YATES. Is there anything specific that we ought to know about, that worries you about the condition of some of these buildings?

Mr. PEYTON. No, sir.

MUSEUM OF HISTORY AND TECHNOLOGY TERRACE

Mr. YATES. All right, you want \$320,000 to complete repairs of the terrace of the History and Technology building.

Mr. PEYTON. Yes, sir.

Mr. YATES. That would complete the work at a cost of a million seventy thousand dollars.

Mr. PEYTON. Yes, sir.

Mr. YATES. You are within that figure, aren't you?

Mr. PEYTON. Yes, sir.

Mr. YATES. How many years has it taken to do that work?

Mr. PEYTON. This is actually a terrace, a paved terrace. I believe that this will be the fourth year. We have done it in annual increments.

Mr. YATES. And, that is now to be completed? Right?

Mr. PEYTON. That is correct, sir.

Mr. YATES. Suppose that instead of doing it in three years you had given the contractor a contract to do it, well, let's say, as fast as he could. Would that have taken about a year? Would you have saved money on that?

Mr. PEYTON. Two problems with that. Number one, we already know how many visitors we have a year and that is very disruptive and we have the Hirshhorn Sculpture Garden partially torn up right now to make it accessible to the handicapped, and that is a problem.

Second, if you try to contract one time over a period of years in a time of rising inflation and changing labor contracts, it puts the contractor in the position of having to do a lot of guessing about what his costs might be, two years or three years down the road. It is much better to contract so that the contractor can give a knowledgeable price.

ACCESS FOR THE DISABLED

Mr. YATES. When do you expect to complete the handicapped access program? And how much will it cost?

Mr. PEYTON. Candidly, sir, that's going to be an ongoing program perhaps for 10 or 12 years. The Smithsonian, as well as other federal agencies, has just been able to do the minimum. The whole philosophy and concept of making facilities available to the handicapped is one which has grown and strengthened in recent years and the standards that are applied to the handicapped are also under change. It is reported that the present chairman of the Architectural and Transportation Barriers Board, the administrator of Veteran's Affairs, Mr. Cleland, appeared recently and advocates adopting the standard that has been developed by the State of Illinois for all of the federal government. If that happens, it will set off a whole new round of surveys of buildings, of new criteria, and so on and so forth.

It will be a long program and an expensive one.

Mr. YATES. Will it be possible in future budget justifications to include a table comparable to that shown for zoo construction for each of the major areas shown in the justification?

Mr. PEYTON. Yes, sir.

SECURITY LIGHTING

Mr. YATES. How much money do you want for security lighting for the Mall museums?

Mr. PEYTON. We have a survey ongoing and I believe that we have an item of about \$10,000, as I recall.

Mr. YATES. Is that all?

Mr. PEYTON. I am having trouble finding my place at the moment.

Mr. YATES. Why don't you put that in the record together with the kind of program or plan and installation it is.

Mr. PEYTON. Yes, sir.

[The information follows:]

SECURITY LIGHTING—MALL BUILDINGS

An architectural engineering services contract is in progress to study exterior safety and security lighting needs for the institution's Mall buildings and to develop a plan and cost estimates. For fiscal year 1981 an amount of \$9,000 is required to conduct a pilot test on one segment of the Mall to determine under actual conditions the adequate level of lighting necessary to improve safety and security. Additional funds will be requested in future years to implement the plan that is adopted. Improvements will focus on installing a system to control lighting levels, requiring the installation of new conduit, switches, additional lights and new fixtures, as appropriate.

CHILLED WATER PUMPS

Mr. YATES. Now, you want \$100,000 for the first phase of replacing the chilled water and condenser pumps at the History and Technology Building. What's the total cost of that going to be?

Mr. PEYTON. This will be done in two phases, and a matching amount will be requested at a later time.

Mr. YATES. I missed you.

Mr. PEYTON. And a matching amount to be provided, I believe, in fiscal year 1982.

Mr. YATES. Does that make the \$200,000?

Mr. PEYTON. Yes, sir.

Mr. YATES. Okay. You say that by reducing energy consumption the project is expected to pay for itself through utility cost savings in two years?

Mr. PEYTON. Yes, sir.

ENERGY REQUIREMENTS OF THE MUSEUM SUPPORT CENTER

Mr. YATES. More power to you. It suddenly occurs to me that Mr. Perrot's Suitland facility is going to be totally air conditioned. I shudder to think of what the cost of that is going to be for maintenance. The system you are going to have there, wouldn't, for example, be like the IBM system in the IBM in Chicago where they use the heat of the people and facilities, in connection with the use by computer, in order to heat and air condition the building?

Mr. PERROT. There will be very few persons in the storage facility, Mr. Chairman. However, we are planning to retrofit to solar energy for some aspects if this becomes viable in a meaningful way. We will use solar energy for hot water and for utility purposes but not to take care of air conditioning at this point. We will retrofit if this becomes a possibility in the future.

Mr. PEYTON. There are a number of energy conservation features that we have planned into the building. First of all, the orientation of the building itself considers that our heaviest load in terms of energy occurs in the summertime and on the south and west where the heaviest sun load comes from, we have solid walls with no windows and we have a very heavy insulation factor in the building both insofar as the roof and the walls are concerned.

Mr. RIPLEY. We simply have to persuade the Fine Arts Commission that this is esthetically tenable.

Mr. YATES. Don't they believe it?

Mr. RIPLEY. Well, the problem sometimes is that they don't think that it looks nice to have a blank wall.

Mr. YATES. You have to do that for the Suitland building?

Mr. RIPLEY. We have to, don't we?

Mr. PEYTON. They have reviewed it, but they are sympathetic towards something like this. Their position is advisory to the federal agencies in this area, but I think they recognize the location, after all, is not on the Mall and has plenty of land around it. There will be trees and various other landscape features which will help enhance the appearance.

Mr. YATES. What do they want you to do, put windows in?

Mr. RIPLEY. Well, I was just saying, it is a problem sometimes to think in terms of energy conservation and at the same time to come up to commissions and committees who may have esthetics in mind and think that energy really isn't a problem.

MOUNT HOPKINS SITE DEVELOPMENT

Mr. YATES. You want \$400,000 for a new base complex for Mt. Hopkins and \$100,000 for road improvement. Are these single shots? Or, are they ongoing?

Mr. CHALLINOR. We have been advised by the Santa Cruz School District which is our landlord at our base headquarters that after June 1982 they want their building back. So, as a prudent manager we are now seeking funds for the initial construction or phased development of a substitute base center for our operation at Mt. Hopkins. This presents somewhat of a dilemma because we do have priority for the road to complete the last 5.5 kilometers of insloping to make the road safe. But, in that this is a priority to have a place as headquarters to work from, we are asking now \$400,000 to begin the phased development of constructing a vehicle maintenance facility to replace the one that we will have to move out of by June 1982.

Mr. YATES. What will the total cost likely be?

Mr. CHALLINOR. I would expect the total cost of the new facility to nearly double that amount.

SMITHSONIAN TROPICAL RESEARCH INSTITUTE DEVELOPMENT

Mr. YATES. What is your Tivoli site?

Mr. CHALLINOR. The Tivoli site is that area where the old Tivoli Hotel was located in Panama. That was torn down because the termites finally got it about three or four years ago, and we are now using the relatively recently constructed laundry and kitchen facilities of the old Tivoli Hotel which were made of cinder blocks—that has been converted now to an administrative headquarters for the Smithsonian Tropical Research Institute. The Tivoli site is about 4 and one-half acres that are assigned to the Smithsonian. It is a very prime site as far as real estate values are concerned in the Republic of Panama.

CHESAPEAKE BAY CENTER WELLS

Mr. YATES. Have you gotten an environmental assessment of the impact of installing additional wells at Chesapeake?

Mr. CHALLINOR. That, I believe, will be done if it hasn't already been done.

Mr. YATES. You don't know whether or not it has.

Mr. CHALLINOR. I do not know, but it will be easy to find out.

Mr. YATES. Please provide it for the record.

[The information follows:]

ENVIRONMENTAL ASSESSMENT ON THE INSTALLATION OF WELLS AT THE CHESAPEAKE BAY CENTER FOR ENVIRONMENTAL STUDIES

It is currently anticipated that no environmental assessment is necessary for this project. At the appropriate time, the Chesapeake Bay Center For Environmental Studies will secure a well permit from the State and will comply with the applicable State and County standards.

ENERGY CONSERVATION MEASURES AT SUPPORT CENTER

Mr. RIPLEY. Mr. Chairman.

Mr. YATES. Mr. Ripley.

Mr. RIPLEY. May I insert for the record so long as we were talking about energy concerns at this Museum Support Center, a list, a very short list, that we have drawn up of examples of what we are doing to try to conserve energy in this building. We have been terribly conscious about it. The problem is——

Mr. YATES. In the building itself.

Mr. RIPLEY. Yes. The problem is that the technology has not kept up with our schedule of construction, so as Mr. Peyton and Mr. Perrot say, we are putting in some facilities which will be adaptable to improvements made in the future.

Mr. YATES. Okay. This may go on the record at this point.
[The information follows:]

Smithsonian Museum Support Center—energy conservation features

1. Entire facility is oriented to take advantage of optimum exposures. Cooling is the greatest energy user so storage modules are oriented south and west (without openings) and research/office element (with windows) is oriented north and east.
2. Internal street concept provides 100 percent more "exterior wall" with windows for the research office wing without actual exposure of this wall to outside environmental factors.
3. All windows are thermal break double glazed.

4. One refrigeration machine is provided with heat recovery condenser.
5. Domestic hot water is pre-heated with condenser water.
6. Solar hot water heating provides 300,000 btu/square foot/year.
7. A VAV system is incorporated in the facility.
8. A chilled water storage tank is provided under the energy plant.
9. Chilled water optimization controls are incorporated in system.
10. All chiller motors have low kw.
11. Make-up air hoods are provided in research areas.
12. Air economizer cycle-enthalpy control is provided.
13. All exterior walls and roofs are designed with a low "U" value of .05.
14. Lighting systems are task oriented and most areas will be provided with dual switching capability for optimum utilization of lighting.

FURNISHINGS OF SUPPORT CENTER

Mr. YATES. Does your cost estimate on the building include the funds needed to equip the structure after it is built? Your estimate is \$49 million, as I remember it.

Mr. PEYTON. We have a \$2 million dollar amount in there for furnishings.

Mr. YATES. Included in the \$49 million?

Mr. PEYTON. Yes, sir.

Mr. YATES. Why don't we make it \$50 million just to give it a round figure.

Mr. PEYTON. That will clearly pay for carpeting, light control devices at the windows, some built-in types of shelving and things of that sort. I think it is entirely possible, as we get further down the line in the development of the design of the project and people start thinking more about how they would actually operate in this space, there will be some equipment items identified that we would want to ask to be funded under the S&E account.

FUTURE PLANS

Mr. YATES. What haven't we discussed?

Mr. RIPLEY. Well, plans for the future. That's the only thing that ever usually concludes. I remember in the past years, I would say our plans for the future are extremely conservative from this point on, Mr. Chairman.

Mr. YATES. What does that mean?

Mr. RIPLEY. Well, I think we are deeply concerned about the present situation of the country. We feel that we've arrived at a certain level of being able to expose the Smithsonian Institution to Americans and as internationally as possible. And I think we would like to maintain this level. Aside from this one Support Center and the proposed plan for the African Museum and the Oriental Museum, largely underground, and more outreach, we really have no further plans for expanding our activities. I think that we are in danger of a kind of recession period and I think it is prudent for us to hedge our bets and hold in pretty much where we are now.

So I assure you that the octopus on the Mall—its tentacles are somewhat chilled at the outer limits. We would like to help the American Indian Museum in any way that seems appropriate in the years to come, with legislation or other considerations in the state of New York, we would like to do appropriate things about additional buildings such as the Tariff Commission Building. We

would like to be very helpful in any broad philosophically oriented program for educating people better as it were. We feel great remorse about the level of education in this country at the present time. We feel it has deteriorated and to the extent that museums or an institution like ours can help to bridge some of that gap. We would like to make our best efforts.

MUSEUM OF AFRICAN ART LOCATION

Mr. YATES. We discussed last year the protest that was being made by some, that the Museum of African Art should not be moved from its A Street location to a new building. The argument, or course, was that this was Frederick Douglass' home.

Mr. RIPLEY. Yes. It's a single house. It was Mr. Douglass' winter home.

Mr. YATES. And that it ought to be kept there as the proper place for this museum. Has that protest been quelled or has it disappeared?

Mr. RIPLEY. I don't believe it's visible at the present time. I think the concept of enormous public exposure to the Art Museum on the Mall has gradually replaced the feeling of conservatism. Everything is nice where it is now and it's been attractive to keep it there and to develop it. A kind of nostalgia always builds up about something that has been done up to that point. You can always find people who will vote for or against a project that's suddenly expanding out and moving, as it were.

I think the problems remain of traffic congestion and of getting increasing numbers of children's classes in busses to the present site which would be completely eliminated for the foreseeable future by changing the building to a downtown site on the Mall.

It's a very nice thing—a nice concept to have a Museum of African Art representing aspirations, culture, religion, things of this sort in the African tradition on the Mall, in the center of the Nation's Mall. There is nothing against it, basically. It's a heroic place to be. It lends dignity and enhancement to the concept.

I think that the other idea of keeping it right where it is because it has always been there is really largely based on nostalgia.

I think the house, as a house, which could be renovated and maintained as some kind of an historic site, is one problem which really is not germane to the concept of the museum as a whole.

Mr. YATES. It occurs to me that I haven't asked Mr. Peyton about the status of repairs to the Museum of African Art.

Mr. PEYTON. We have engaged an Architect-Engineer to prepare the necessary drawings for that. Those should be finished around the end of May and we expect a contract shortly after that.

Mr. YATES. In the amount made available?

Mr. PEYTON. Yes, sir. We are taking the approach that we would like to be thought as a prudent owner recognizing that we will be vacating the premises. Whether the buildings will be used for public purposes in the future, we can't determine right now. But we certainly are attempting to provide safe structures that meet the requirements for public occupancy.



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